**Sports Betting**

Sports betting is the activity of predicting sports results and placing a wager on the outcome. The vast majority of bets being placed on association football, american football, basketball, baseball, hockey, track cycling, auto racing, mixed martial arts and boxing at both the amaterur and professional levels.

Sports betting can also extend to non-athletic events, such as reality show contests and political elections, and non-human contests such as horse racing, greyhound racing, and illegal, underground cockfighting.

**Betting exchange**

A betting exchange is a marketplace for customers to bet on the outcome of discrete events. These exchanges normally generate revenue by charging a small **commission** on winning bets.

Betting exchanges maintains the bettor details, the bet type, return amount upon successful bets, exchange’s commission etc.

What if the exchange shuts down after pulling in all the betto’s money?

What if the exchange decides not to pay back to the winner’s?

What if the commision percent was hiked from X% to Y% (assuming Y% > X%)?

There can be as many what ifs as it can be and as you think.

Problem. Centralization. Third-party-dependency. Trust established via third party.

How about bringing Blockchain to this context?

How about writing Smart Contracts that govern winning amount disbursal, commission percent etc?

*“Blockchains are immutable ledgers, whose power can be realized by writing smart contracts on top of it.”*

**Use case:**

* For simplicity let us assume there are 2 cars participating in F1 race.
* Person A bets on Car1 and Person B bets on Car2. (There can be multiple bettors for a single car)
* The bettor’s profit percent is fixed.
* The exchanges commission percent is fixed.
* Winners share percent out of total commission is fixed for passing on the winning car’s id.
* As soon as the race finishes the winner passes on the Car’s Id such that it will be set as the winner id through the smart contract into blockchain.
* Smart contract begins it’s execution and disburses the winning bettor’s amount as per the fixed profit percent, transfers the winners share percent, transfers the commission.

All the above details are added via the Smart Contracts into the Blockchain.(Immutable, no need for third party to create trust.)

Here you are putting your money into the smart contract, thus, you can also withdraw your money prior to start of the race (or whatever the withdrawal condition will be)

**Example:**

Person A bets 20$ on Car1, Person B bets 40$ on Car2.

Profit Percent: 20%

Winners Share: 1%

Before starting of the race the Smart Contact has all the above details in it.

Total amount in the smart contract = 60$

Race starts and is finished with result as Car1 wins

Person A’s bet has won.

Person A gets 20% of his/her 20$ + 20$ (betted amount) => 4$ + 20$ = 24$

Remaining amount in smart contract (Commission) = 36$

Winners Share is 1% of total commission = 3.6$

Remaining amount in smart contract (Commission) => 36$ - 3.6$ = 32.4$

*“For passing on the winnig car’s id, the driver will get say 1% out of commision. Thus it is a win-win conditon for the winner, you get the race winning prize plus some amount out of commission.”*

*Incentivizing the driver to do this will remove owner dependency of explicitally invoking to set winning car’s id.*

***Technical Details:***

*Creating a library of smart contracts that can handle different types of bets and their outcomes.*

*Imagine it to be the OpenZeppelin-of-Betting.*

*ERC721 will be used for NFT’s.*

*ERC20 will be used for betting say for example BOBT (Bet-on-Blockchain-Token)*

*Scalability on blockchain can be achieved by using layer-2 scaling solutions (eg: Matic)*

*Oraclize can be used to perform offchain transactions.*

*Machine learning and AI can be used for creating a prediction model that will help bettors in finalizing their bets.*

*Maintainers or validators can be given some amount from the commission for maintaining the network.*

*Note: Since it is evolving any help is much appreciated, and would love to work in collaboration if somebody is willing to contribute.*

*Let us BUIDL.*

*Let us Blockchain.*

*Let us BOB.*

*It can be applied to any type of betting in the sports.*