Bittrain ICO Whitepaper

A Cryptocurrency Exchange for Many not for Few

Cryptocurrency Exchange from Tomorrow here Today
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1- Our Vision- A Cryptocurrency Exchange for Many not for Few

There are two major problems with the Cryptocurrency Exchanges out there. First off, Nothing in the world of cryptocurrency exchanges is free. As Cryptocurrency trading volumes are growing every day, so is the greed of cryptocurrency exchanges. Exchanges charge traders for every single transaction regardless of how small or big the transaction is, profiting only a few. What is the point of making $100 for a small investor if he or she ends up paying $110 in total in exchange fees and commission. Cryptocurrency exchanges rip the traders off their profits in the name of fees and commission. Transaction fees act as a massive brake on the potential liquidity of the cryptocurrency market.

Secondly, traders have to deposit their money with the Exchanges, where the money is at the risk of being stolen by hackers, withheld by the exchange or frozen by the authorities.

Bittrain Exchange is a Cryptocurrency Exchange for Many not for Few.

Bittrain Exchange has eliminated the transaction fees by creating its own cryptocurrency, the BTRC token. BTRC token is a smart contract token built on Ethereum blockchain. Traders must acquire BTRC tokens to complete a trade on the Exchange platform. An exchange that charges no fees will make BTRC tokens very desirable and will increase token price. The Bittrain exchange will not punish active traders that provide liquidity to the market in the name of fees and commission but will generate its revenues by creating and selling a few BTRC tokens instead. The number of new tokens created will be decided by existing token holders through a decentralized smart voting platform.

Second boost to liquidity will come from the trustless nature of the Bittrain Exchange. Unlike other exchanges, traders on Bittrain Exchange will be able to trade without having to trust the exchange with their money. Account balances are held by a decentralized, independent smart contract on the Ethereum blockchain, not by the exchange. The exchange does not have physical possession of the funds and at no point does the exchange hold anyone’s private keys.
BTRC token holders will decide how many BTRC tokens to issue and when through a decentralized smart voting platform in order to cover the operational costs of the Exchange. Maintaining the exchange is in the best interests of all BTRC token owners because the exchange creates demand for the BTRC token and gives the token its utility and value.

2- Bittrain Exchange

The Bittrain Exchange provides a zero transaction fees buying and selling platform for digital currencies. The exchange does not hold any client funds, combining the security of decentralized account balances with the speed and reliability of a centralized servers.

2.1- Business Model

Cryptocurrency trader’s Utopian dream of a commission-free exchange is no longer a dream. By creating an ERC-20 compatible protocol token on the Ethereum blockchain, called the BTRC token, and using it as the Bittrain Exchange’s native currency, the exchange can eliminate transaction fees on trades and cover costs by creating new tokens instead of charging fees. The relatively small inflation cost of creating extra tokens is more than offset by the demand that is created by traders who must own BTRC tokens to participate in the commission-free, liquid markets that are created by this model.

The size of this demand for BTRC coming from traders during a period where cryptocurrency trading volumes are expected to grow exponentially will be orders of magnitude greater than the small number of extra tokens that must be created to generate this demand. The Exchange is
what gives the BTRC token its utility as a vehicle for trading highly liquid digital markets without any transaction fees.

There will be no new token issuance for the purpose of revenue generation for approximately 2 years after the launch of the Bittrain Exchange because the costs of running the exchange will be covered by the proceeds of the BittrainCoin ICO. During this 2 year period, new user registrations and trading volumes will likely rise sharply, and all new traders will be competing to buy a limited number of BTRC tokens. Any price rise of the BTRC token caused by this sharp increase in demand will lessen the inflationary impact of the first token creation event by reducing the number of BTRC tokens that must be created to cover upcoming costs.

Around December 2020, the Exchange will start creating new BTRC tokens to cover its operating costs. These costs will include software development, servers, staff, premises, marketing, support and all other associated costs. Based on the projected costs and the current price of BTRC, traders will vote on how many new tokens to create to cover those projected costs. The vote will be done through Decentralized Governance by Blockchain — 1 BTRC = 1 vote.

New BTRC tokens will be created via a fully audited token creation smart contract. Buyers will send ETH to the smart contract address and automatically receive the correct amount of BTRC tokens in return. A separate, fully audited smart contract will keep a running total of all token issuance events so that an accurate and verifiable total supply of BTRC tokens is always publicly available.
2.2- Key Characteristics of Bittrain Exchange

- **Zero trading fees**
- **Advanced technology**
- **Complete privacy**
- **Decentralized account balances**
- **Digital market makers**
- **High liquidity**
- **Blockchain driven**
• **Governed by traders**

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**Own Cryptocurrency**

The Bittrain Exchange has its own Cryptocurrency, the BTRC token. The Investors must acquire BTRC tokens to complete a trade that means all deposits and withdrawals on the exchange platform are made in BTRC tokens. The exchange costs will be very low as BTRC will not hire Good for Nothing insanely paid executives. The exchange costs will be covered by creating new tokens instead of charging any commission on transactions.

**Zero Trading Fees**

Bittrain Exchange will not charge fees of any kind. Whatever profit the investors make on the transactions, will be their net profit.

**Advanced Technology**

Bittrain Exchange is using the most advanced technology and programming language Ejabberd (XMPP) and Erlang for their ultrafast speed, real time updating capabilities and ability to handle large scale transactions seamlessly. This is the same technology being used by end to end encrypted companies like WhatsApp. The trading interface updates prices in real time and is completely web browser.

**Complete Privacy**
All transactions on Bittrain Exchange are completely anonymous and ultrafast. Investors can start trading without needing to complete long registration process and providing identification documents. Bittrain Exchange will not collect any personal data that exposes investors to any kinds of hacks and Identity theft.

**Decentralized Account Balances**

Bittrain Exchange does not hold Investors account funds. The Investors hold their funds in a decentralized and independent smart contract built on Ethereum Blockchain such as MyEtherWallet and MetaMask. As Bittrain Exchange does not hold Investors funds, Investors are completely safe from Exchange hack losses that are a very serious security issue for current exchanges.

**Digital Market Makers**

Digital market makers are a catalyst to a highly efficient trading. Bittrain Exchange is using highly sophisticated robots known as Digital Market Makers to maintain market equilibrium and liquidity. Liquidity begets liquidity. Bittrain market makers are automated trading bots with algorithms that are programmed to break even. Not being driven by profit, the market makers do not exist to extract value from traders. With their highly active trading strategy and a large trading bank of 20% of all tokens in circulation (10M BTRC), the Bittrain market makers help maintain liquidity even in volatile market conditions.

**Highly Liquid Market**
Bittrain Exchange removes all fees associated with a transaction that encourages a large number of investors to participate in trades that they would avoid in a regular exchange due to hefty commission. This makes the market very liquid.

**Blockchain Driven**

BittrainCoin is being built on cutting edge blockchain technology. The Bittrain exchange business model from using its own currency BTRC to Investors storing funds in an independently created smart contract have only been possible because of the emerging blockchain technology.

**Governed by Traders**

Traders on Bittrain Exchange will use Decentralized Governance by Blockchain to determine how many new BTRC tokens to issue and when.

**3- BTRC Token**

- BTRC token is the native currency of the Bittrain Exchange.

- It is the creation of new BTRC tokens after approximately 2 years that allows the exchange to operate without needing to charge transaction fees.

- The BTRC Token Sale/Initial Coin Offering (ICO) creates an initial supply of 25,000,000,BTRC (twenty five million BTRC tokens).

- There is no creation of new BTRC tokens for the first 2 years after the launch of the Bittrain Exchange.
• Approximately 2 years after launching, the Bittrain Exchange starts creation of new BTRC tokens to cover the costs of running the exchange.

• New token issuance causes inflation, but it also creates high demand for BTRC tokens because of no fees business model.

• BTRC is an Ethereum based, ERC-20 token that will be freely tradable for Bitcoin, Ether and many other cryptocurrencies on the Bittrain Exchange platform.

3.1- BTRC Token Supply and Distribution

During the initial sale, 25 million BTRC Tokens will be made available. Out of this, 50% is up for sale to the public, 20% goes to Bittrain Market Makers, and 30% is reserved for team on a 5 year vesting schedule. So 70% of the coins created will be in circulation.
25M Total BTRC Supply

• 12.5M BTRC (50%) Token Sale

• 5M BTRC (20%) Digital Market Makers

• 7.5M BTRC (30%) Team (current and future)

BTRC Token Sale—12.5M BTRC (50%)

12,500,000 (12.5M) BTRC tokens will be sold in the BTRC Token Sale. Buyers will buy BTRC tokens starting from price of USD $1 per BTRC token.

Bittrain Market Makers—5M BTRC (20%)

Bittrain market makers are automated trading robots with algorithms that are programmed to break even. With their highly active trading strategy and a large trading bank of 20% of all tokens in circulation, they help keep the market liquid, even in volatile market conditions.
Team (Current & Future)—7.5M BTRC (30%)

7,500,000, (7.5M) BTRC tokens will be paid to the founding team to compensate them for past and future work. These tokens will be vested in 5 year schedule to ensure that team has strong incentives to create a stable, elf-perpetuating business model that provides ongoing and consistent demand for BTRC tokens after the Token Sale funds have been spent.

3.2- BTRC token ICO Sale proceed Allocation
3.3- Buying and Selling BTRC Tokens

A highly liquid market in BTRC tokens is essential to the success of the Bittrain Exchange. Buying and selling BTRC tokens must be free, quick, easy and as frictionless as possible. Traders must be able to instantly convert a wide range of crypto-currencies into BTRC tokens and back again with zero transaction fees. Apart from making efforts to list BTRC on various exchanges, the BTRC Exchange traders will be able to buy and sell BTRC tokens on Bittrain platform. Bittrain Exchange business model of encouraging a highly liquid market could lead to very heavy traded volumes of BTRC tokens.

4- Financial Model

4.1- Revenue generating tokens issuance

Revenue Generating Token Issuance Starts in December 2020
Approximately 2 years after the official public launch of the Bittrain Exchange, we will start creating new BTRC tokens to cover the ongoing costs of running the exchange. The number of new BTRC tokens to be created will be determined by other BTRC token owners who will vote on proposals made by BTRC token owners. Proposals of how many new BTRC tokens to create can be submitted by any BTRC token owner and will be based on the projected costs of operating the exchange and the current market price of BTRC. New tokens will be created through a transparent, fully audited token creation smart contract. Buyers will send ETH to the smart contract address and will automatically receive the corresponding number BTRC tokens in return.

A large number of new trader registrations on the Bittrain Exchange in the first 2 years will create a surge in demand for BTRC. The higher price of BTRC means fewer tokens must be created to cover costs, reducing the inflationary effect on the total supply of BTRC.

4.2- BTRC Token Price Projections and effect on Token Issuance

Model

The greater the demand for BTRC tokens by traders on the Bittrain Exchange, the higher the price of BTRC will climb. The following table shows different scenarios and assumptions and their effect on the price of BTRC tokens.

Assumptions

- 2% of traders are whales who buy a total of $800,000 USD worth of BTRC tokens over a 2 year period.
• 10% of traders are medium sized traders who buy a total of $150,000 USD worth of BTRC tokens over a 2 year period.

• 88% of traders are small traders who buy a total of $50,000 USD worth of BTRC tokens over a 2 year period.

• Although the total supply of BTRC tokens is 50,000,000, only 25,000,000 are available to be bought and sold because the rest are locked up by the Digital Market Makers and the Team.

• The table below calculates the projected price of BTRC by dividing the total dollar amount that traders purchase in the 2 years following launch by the total available supply of BTRC tokens and then adding that amount to the price of BTRC tokens at the final BTRC token sale. This price calculation method is does not take into account many factors, such as current market sentiment in cryptocurrencies. The actual price may be higher or lower depending on the cryptocurrency market conditions.

<table>
<thead>
<tr>
<th>No. of Traders</th>
<th>10,000</th>
<th>50,000</th>
<th>100,000</th>
<th>500,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whales (2%)</td>
<td>200</td>
<td>1000</td>
<td>2000</td>
<td>10000</td>
</tr>
<tr>
<td>Medium (10%)</td>
<td>1000</td>
<td>5000</td>
<td>10,000</td>
<td>50,000</td>
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<tr>
<td>Small (88%)</td>
<td>8800</td>
<td>44,000</td>
<td>88,000</td>
<td>440,000</td>
</tr>
<tr>
<td></td>
<td>Whales Buy</td>
<td>Meds Buy</td>
<td>Small Buy</td>
<td>Total Buy</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
<td>--------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>$300,000,000</td>
<td>$1,500,000,000</td>
<td>$3,000,000,000</td>
<td>$15,000,000,000</td>
</tr>
<tr>
<td></td>
<td>$100,000,000</td>
<td>$500,000,000</td>
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<td>$500,000,000</td>
</tr>
<tr>
<td></td>
<td>$13,200,000</td>
<td>$66,000,000</td>
<td>$132,000,000</td>
<td>$660,000,000</td>
</tr>
<tr>
<td>Total Buy</td>
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<td>$2,066,000,000</td>
<td>$3,232,000,000</td>
<td>$16,160,000,000</td>
</tr>
</tbody>
</table>

|                  | 25,000,000              | 25,000,000               | 25,000,000               | 25,000,000               |
| BTRC Supply      |                         |                          |                          |                          |
| BTRC Price Jan 2019 | $1                    | $1                       | $1                       | $1                       |
| Price Increase   | 413.2/25                | 2066/25                  | 3232/25                  | 16160/25                 |
|                  | $16.52                  | $82.64                   | $129.28                  | $646.40                  |
| BTRC price Dec 2020 | $17.52                 | $83.64                   | $130.28                  | $647.40                  |

4.3- Token Issuance Inflation Projections

The following table shows how many new BTRC tokens would need to be created to cover the next 12 months of operations after Dec 2020 if the BTRC price was as indicated in the table above. The 12 month projected cost of running the exchange increases in each column to take into account the higher support costs, development costs, security costs and marketing costs associated with supporting the increased number of traders.
December 2020

1 BTRC = $17.52  
1 BTRC = $83.64  
1 BTRC = $130.28  
1 BTRC = $647.40

12 Month Costs

$1M  
$2M  
$5M  
$10M

Tokens Issued

$1M / $17.52  
$2M / $83.64  
$5M / $130.28  
$10M / $647.40

57,077 BTRC  
23,912 BTRC.  
38,378 BTRC  
15,446 BTRC

Percentage of Total Supply

+ 0.11%  
+ 0.04%  
+ 0.08%  
+ 0.03%

The worst case scenario in the table above shows that if only 10,000 new traders register in the first 2 years when cryptocurrency trading volumes are expected to grow exponentially, resulting in a stagnant BTRC price of $17.52, the exchange must increase the total supply of tokens by only 0.11% to cover the projected costs of $1M for the next 12 months. The effect of a 0.11% inflation rate on the BTRC price of $17.52 will be negligible.

In the best case example, where 500,000 new traders are attracted to Bittrain Exchange, resulting in a BTRC price of $647.40, the exchange can cover the projected operational costs of $10M for the next 12 months with an increase of only 0.03% in the total supply of BTRC tokens. The effect of a 0.11% inflation rate on the BTRC price would be so small that it will not affect the token price but by doing this the exchange
has secured another 12 months of operational, development and marketing costs that will attract thousands more traders, creating increased demand for BTRC tokens that far outweighs the inflationary cost of creating that demand.

5- Decentralized Trading

By replacing centralized account balances with an independent, decentralized smart contract on the Ethereum blockchain, traders can use the Bittrain Exchange without having to trust the exchange with their money. The system of decentralized account balances solves many of the problems associated with cryptocurrency exchanges.

Hybrid Model of Centralized and Decentralized Components

Bittrain Exchange is a hybrid exchange that combines the speed and reliability of centralized servers and decentralized account balances on the blockchain. This offers traders the best of both worlds when it comes to speed of execution and the safety of their deposits. Traders enjoy the benefits of real time trading on a blazing fast servers without needing to trust the exchange with their money.

Bittrain Exchange is the intelligent combination of the speed and reliability of centralized servers with the security of decentralized smart contracts. The
Exchange interacts with the smart contract in a way that it only obtains and updates the financial information of trader so that the exchange does not have physical possession of the trader’s funds and is unable to do anything else to the funds held in the smart contract.

**The Ultimate Ringfence: Decentralized Account Balances**

- Bittrain Exchange cannot freeze or seize a trader’s funds for any reason, such as outside pressure from authorities, creditors, KYC/AML regulators etc. Bittrain Exchange can and will resist this pressure legally and without consequence because the exchange simply does not have access to a trader’s funds.

- Bittrain Exchange mismanage the trader’s funds in any way by using those funds for other purposes because the exchange does not have control of or access to the private keys of the trader’s BTRC tokens.

- Bittrain Exchange does not hold any private keys and so is therefore not a hacking target.

- In the unlikely event of a security breach of the exchange, Bittrain Exchange does not hold any funds that can be stolen.

**Bittrain Exchange Oracle Updates Account Balance Smart Contract**
The centralized exchange acts as an Oracle to the independent smart contract that holds the traders’ account balances. When a trader wants to withdraw BTRC tokens from his account, the smart contract must first ask the exchange for trader account balance. In this way the smart contract can update his available to withdraw balance. Such updates to a trader’s account balance in the smart contract are on-chain, so to minimize gas costs updates are only sent to the smart contract when the trader wants to withdraw.

Security can be further enhanced by requiring users of the Bittrain Exchange to have the Met mask browser plugin. This ensures that only you have the ability to withdraw from your account balance by utilizing Met mask’s secure identity vault which uses signed blockchain transactions to verify you are the same person who made the deposit. This communication between the exchange and the smart contract presents a potential attack vector to hackers who might want to hack into the exchange for the purpose of updating the smart contract with incorrect information that lets them withdraw more than they have.

6- Decentralized Governance by blockchain

Blockchain technology is the driving force behind Bittrain Exchange: the blockchain allows the exchange to eliminate transaction fees through the creation of its own cryptocurrency, and smart contracts on the blockchain hold traders’ account balances, allowing the exchange to operate restlessly. Bittrain Exchange also uses the blockchain to govern new token issuance efficiently and democratically through rules and voting systems that are encoded into smart contracts. One of the great promises of the blockchain is decentralized governance. On the assumption that BTRC owners will act in their own collective self-
interest, Bittrain Exchange can move forwards as a dynamic organization capable of adapting quickly to changing conditions.

**Voting on New Token Issuance**

BTRC token owners submit proposals with regards to how many new BTRC tokens should be issued to cover the ongoing operational costs of running the exchange.

Current BTRC token owners will act in their own collective self interest when it comes to deciding how many new BTRC tokens to create to cover the costs of operating the Bittrain Exchange. They must balance the inflationary cost of creating new tokens against the benefits of a well-funded, well managed exchange that provides ongoing and increasing demand for BTRC. They must preserve the current value of BTRC by minimizing the creation of new tokens, whilst at the same time creating enough new tokens to cover the development and operational costs of the Bittrain Exchange, which will increase the value of BTRC tokens through increased demand from traders.

Voting on proposals takes time and attention and requires users to be constantly active and accurately informed about everything. BTRC token owners can therefore delegate their voting power to a trusted person who votes on their behalf if they don’t want to play an active role.
7- Roadmap

8- Summary

The Bittrain Exchange is a revolutionary new business model that mints its own native cryptocurrency to replace the need for transaction fees on trades. Commission-free trading will create highly liquid markets by attracting high volumes. As cryptocurrency prices rise, percentage based transaction fees on other exchanges will also rise, further increasing the appeal of a commission-free exchange. Commission-free markets create demand for BTRC tokens which more than offsets the inflationary cost of creating that demand.

Traders on Bittrain Exchange can participate in liquid, commission-free markets without needing to trust the exchange with custody of their funds, further differentiating the exchange from the traditional exchanges that require traders to relinquish full control of their account balances to a central third party that can potentially freeze/mismanage/lose those funds.
Through **Decentralized Governance by Blockchain (DGBB)**, new token issuance for the purpose of revenue generation is run democratically by BTRC token owners. Highly liquid, commission-free trading on a stable, fast and reliable trading platform, during a period of exponential growth in cryptocurrency trading, will attract a large number of traders, creating huge demand for BTRC tokens. As the price of BTRC tokens increases the exchange must create fewer tokens to cover costs, thereby reducing the inflationary cost of creating new tokens.