Whitepaper
(v1)

Lemmatron
18th November, 2021

Introduction

Blockchain has come a long way and products like cryptocurrency, defi, gamefi,.. have been given birth. Crypto trading has been a focal point in the web 3.0 business industry. Be it interest in the project or its financial aspect, people are flooding in this industry every day and in the center of crypto trading sits liquidity. The rate of new projects coming in with their cryptocurrency/token is just too high and as a result, the market suffers from low liquidity. This is the problem Lemmatron attempting to solve.

In the traditional stock exchange, there is some individual behind every trade doing all the work to execute orders. In the crypto market, however, those are all automated by what is called Automated Market Maker(AMM). The asset has to come from somewhere to swap/trade it with another asset. This is where the liquidity pool comes in. Liquidity pool contains assets of pairs or groups of assets(like in balancer) which facilitates crypto trading of the assets in that pool. Anyone is free to contribute to the liquidity pool and as an incentive, a certain percentage of the trading fee is earned by those liquidity providers(LPs).

Current Issue

We know how important liquidity pools are in crypto trading. However, low liquidity invites many problems which are faced by an extremely huge number of crypto project. In fact, low liquidity was voted by 36% of cryptocurrency traders as a major problem they faced in 2018 according to Encrybit.

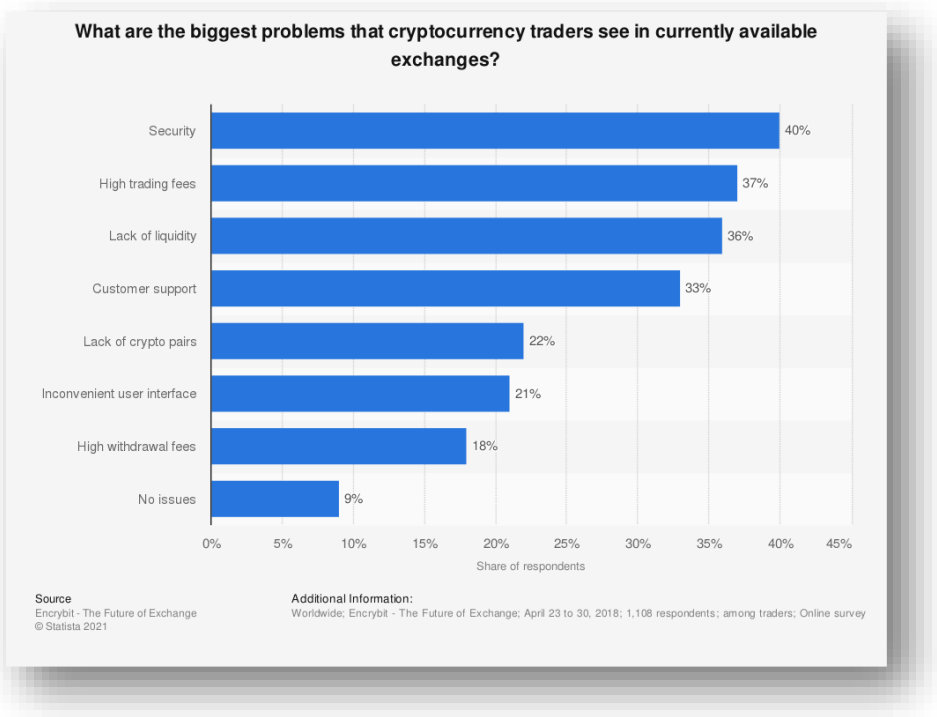

Figure 1 Problems crypto traders face

When the liquidity is low, price change is dramatic with few trading volume resulting in trade not being executed at the same price. This can scare people away as they do not get the equivalent amount of assets in exchange. All the trade analysis tools stop working which is a fundamental right of every trader. Because of these reasons, trading volume plummets, and projects struggle miserably.

Liquidity Pool Incentives

To tackle the problem of low liquidity, an incentive was introduced by exchanges to whoever provides liquidity to the pool. This helped solve the issue to a very small degree and here is why. Every project has to put an enormous percentage of their fund into liquidity which they could have used in product development. Not only that, they have to allocate a large number of their token for LP incentives. The LP incentive is fine for a large pool but the fundamental problem of low liquidity remains unsolved. A project with already low liquidity has to offer an insane APR incentive to attract new LPs. This is highly inflationary tokenomics. Once those LPs receive their incentives, they are highly tempted to sell their token because they are in the pool for financial interest. The liquidity pool suffers even more and when the project lowers the incentive, all the LPs exit the pool in search of new "shiny" pools with insane APR. As a consequence, there are countless projects stuck in the pit of low liquidity looking left and right to increase their liquidity.

Lemmatron

Enter Lemmatron. Lemmatron is a liquidity directing project aiming to solve markets with low liquidity. At the same time, the treasury of Lemmatron is designed to increase constantly which helps to maintain the floor price of its native token LEMA. The architecture of liquidity flow in Lemmatron is straightforward and hence, easy to understand.

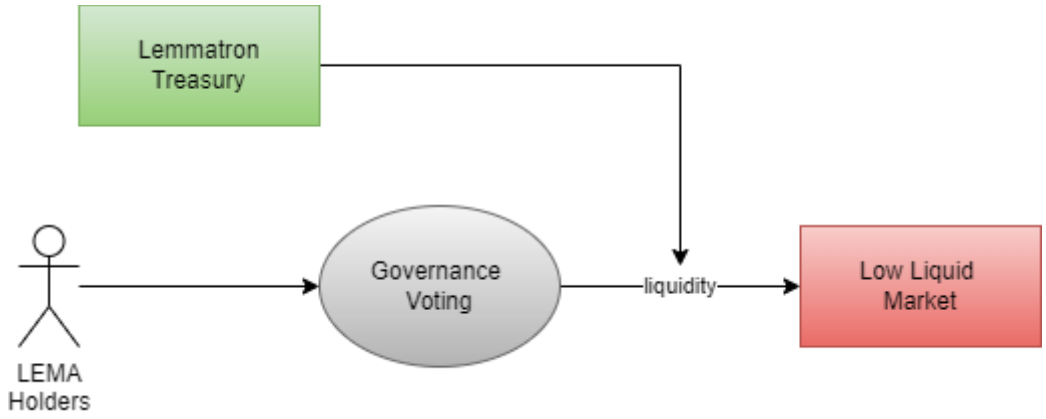

Figure 2 Top view architecture of Lemmatron

The general idea of Lemmatron is to keep the liquidity pool stable. This is the first and foremost thing that any projects have to do in order to increase their liquidity. Without this, liquidity providers(LPs) are not attracted. We can understand why this is crucial with the following example.

Let's say a project raised $100,000 and put $50,000 into liquidity and $50,000 into product development. It could have been better if all the funds were used to develop the product but to facilitate trading of its native token, 50% of the fund has to be put into the liquidity pool. This makes the project increasingly difficult to deliver a product of quality which they could have delivered with that additional $50,000. The LP incentive could help the project but $50,000 is a low liquidity and any LP with experience will classify this pool as "highly risky". This would have been different if the pool had more liquidity because the risks for LP would dramatically reduce and attract more liquidity as a result. That nudge to attract more LPs is done by Lemmatron. So, projects can focus completely on product development.

A part of the Lemmatron treasury is allocated for liquidity directing. LEMA holders can cast their votes on where that liquidity should be directed. The project with most votes will then receive the liquidity until certain conditions are met after which the liquidity comes back to Lemmatron. Thus, the liquidity that is directed to other projects will all be owned by Lemmatron. Having said all of this, the projects do not have to spend a lot. The cost for x amount of liquidity in their pool would be no more than $x/10$.

What is Under the Hood?

Brief explanation of how Lemmatron works coming soon in v2.