

# Tokenized Model for Content Royalties

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## Detailed Analysis

Few business right now are feeling the pain of copyright and infringement issues more than the music production industry. Some statistics estimate that 20-50% of royalties owed by digital music services to rights holders are not paid out correctly, leading to hundreds of millions of dollars of lost revenue. The key players in this space are the content creators, the music distributors, and customers. Currently, music distributors such as Spotify and Apple Music facilitate interactions between musicians and listeners and take a small percentage of the revenue generated from that music. However, what if there were a way to bypass such intermediaries and create a direct pipeline between content producers and listeners?

## Description of the Solution

Create a decentralized music distributing service while utilizing blockchains to ensure fair and transparent compensation to artists for the permission to use their musical assets, while also identifying and tracking user access to creative work online. The blockchain component aims to help ensure creators and rights holders prove they are the owner of a piece of work and receive due payment correctly.

This model eliminates any intermediaries like Spotify and Apple Music in deciding the share that content creators get out of the revenue generated by the companies. This can be achieved by tokenizing the number of streaming hours people utilize via the decentralized streaming service.

On an average, people listen to about 100 hours of music per month via their respective streaming services. We use this statistic to value each of our tokens at 110 hours of streaming per month. Individuals buy these tokens on a monthly subscription basis at 7.99USD. As they stream songs, a fraction of the token is deducted from their wallets and transferred to the content creator directly over the blockchain. However, if a particular user does not utilize all 110 hours worth of tokens, the residual amount of these tokens in their wallets will be returned to us every month, and will directly correspond to the exact amount of profit we generate.

The success of our business is dependant upon the cooperation of record label companies. A large diverse catalogue of songs would be expected to attract new users. Thus, market solution is not

widely required as long as our company earns the trust from the record label companies and the musicians.

### **Threats Analysis**

1. A large amount of efforts are expected to earn the trust from well-known musicians
2. A large amount of capitals would be required for daily operations before enough users and gross profit are collected.
3. Some of our greatest competitors are music streaming companies such as Spotify, SoundCloud, and Apple Music. Greater rewards may be given to the artists. Besides, with larger capital and resources, our competitors can imbue our business model into their systems very fast. All of these may result in significant competition.
4. The current music platform in the market has already recorded a large number of songs from the well-known singers and bands. It is possible that the consumers will not react responsively and make our company even harder to break the current status quo.
5. The current trade platform based on blockchain technology is not user-friendly. Since our product is designed to be a front-end music platform for not technical people, we consider the simplicity of our UI design a big challenge for our business.
6. Specific terms in the contracts between well-known musicians and record may have strict regulations against music platforms making direct transactions to the musicians. Such regulations may make our product not special from the perspective of well-known musicians compared to Spotify and Apple Music.

Our technology solves the problem outlined because it creates a much more transparent and artist-friendly platform that eliminates a centralized business corporation that decides how much money is allocated to the artist. Our model ensures that the participating artist gets paid via a smart contract system.

### **Technical Design**

Our solution will be a web-based application. Our technology stack includes the React technology stack for the front end user interface. There will be three different types of users- the Streamers, Ad Agencies and the Content Creators. Content creators will also be allowed to stream music, but their accounts will have extra functionality for uploading music.

Our back end functionality will be split into two parts:

- On-chain functionality: Our system for distributing content royalties will be completely placed on the blockchain. Each user will have an associated wallet address. We will program a smart contract that will handle the distribution of content royalties from streamer token accounts to content-creator token accounts. Streamers will be provided with a single token on a monthly subscription basis, and each of these tokens enables 110 hours of music streaming which is about 2100 streams on average. Content creators will be allowed to purchase these tokens as well. They will be paid a minimum amount as their music is streamed, and depending on their total stream count and rating this amount will be readjusted. They will also be paid a bonus amount in tokens for each upload which they can use for streaming or exchange for cash on the streaming website. All the tokens that remain unused at the end of the month are transferred back to our company's wallet for profit, or money for operational costs.
- Off-chain functionality: Our system for the streaming service will be centralized, as we will have a central database of music that would allow customers to listen to their content. Another off chain functionality is the ad system, in which ads will be displayed for the users paying for the cheaper subscription. Every time an ad is displayed on a user's interface, we will make money.

## Incentive Design

The price point for our product will be \$8.99 a month. If we take this number and divide it by the average number of songs a person listens to a month (2200), artists will make 0.4 cents per stream. This would incentivize small and large artists alike to join our platform. Small Indie artists would be happy to get some form of payment. Large artists would still make more than they would from other music providers because artists would also be given music tokens for each track they upload (adjusted based on a proprietary rating system).

There are two sources of revenue for content creators and three sources of revenue for our company. For content creators, the revenue/royalties are as follows:

1. Royalties are distributed automatically between creators and listeners with music tokens.
2. Creators get music tokens for each track they upload.

Our company will obtain revenue in the following ways:

1. For every token that is not completely used up at the end of the month, our company will obtain the leftover token value and convert it to USD
2. A monthly subscription fee of \$8.99 for people who do not want advertisement. There will be a \$1.99 subscription fee for people who are okay with advertisements. In order to compete with Spotify however, once our company hits a (to be decided) profit milestone, the platform with advertisements will be free.
3. We will have advertisements on the platform from third party companies.