

DRUMS: A decentralized music promotion ecosystem that rewards music lovers, artists, and promoters.

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Abstract—Artists and promoters spend billions of ad dollars every year to promote their music and concerts. DRUMS is designed to shift that spending from ad networks to music lovers who will be able to attend shows more affordably as a result. Promotion costs for artists and promoters will be reduced while making them more authentic through organic sharing.

I. INTRODUCTION

Artists no longer generate significant income from music sales and streaming^[1], so their revenues from live music are critical now more than ever. The average ticket price has reached \$46^[2] pricing out millennials who spend \$40 per year on concerts and theater^[3]. Climbing production costs have contributed to the steady rise in ticket prices^[4]. In a sustainable ecosystem, artists, promoters, and venues would generate satisfactory income while keeping ticket prices as low as possible. However, this is not the case. Our goal is to improve this environment by way of displacement of ad dollars from ad networks to foster the music promotion economy.

II. AD NETWORKS

Record labels spend 11% of their revenues, \$1.7B, on marketing and promotional campaigns for artists^[5]. Similar amounts are spent to promote live events by concert promoters. Live Nation alone spent more than \$400m in 2017 on advertising and marketing their concerts^[6].

Ad networks led by Facebook and Google take up a big chunk of the marketing budget for music releases and shows. Group M reports that 84% of the digital ad spend in 2017 goes to Google and Facebook, a statistic that counts as “exceedingly bad news for the balance of the digital publisher ecosystem”^[7]. Promoters, venues, and artists have invested years into building social media presences, investing time and content into the platform, but as organic reach declines on the most popular platforms like Facebook, stakeholders are obliged to increasing costs in order to

communicate with those very audiences they worked to cultivate.

This rising cost of communicating with audiences has a tangible impact as cost driver in the music and live music industries.

III. THE DRUMS SOLUTION

The DRUMS Token Economy can make a substantial impact in the promotions of concerts and music releases to energize the music promotion ecosystem. DRUMS will be utilized to materialize the value exchange that will take place among the stakeholders in music releases and live music. These stakeholders are music lovers, promoters, and artists. The DRUMS token will not be offered to the general public via an ICO token sale; instead, it can only be earned by the ecosystem stakeholders.

In the initial phase, Jukely, a concert-going subscription service, will launch the first application built with DRUMS. Stakeholders will be able to earn DRUMS on Jukely by adding value in various ways, described in detail below. In future phases, as more apps and platforms participate in the DRUMS Ecosystem, the utility of the token will be distributed to multiple platforms.

A. Music-lover Value Proposition

We propose that music releases and concerts can be promoted more cost efficiently, more effectively, more authentically via a distributed network of micro-influencers communicating with their friends. In the DRUMS ecosystem, music lovers will be able to earn DRUMS tokens by sharing concerts and music releases with their friends.

An initial application of the DRUMS token ecosystem is depicted by the “Hype” feature for promoting upcoming events and music releases, and the “Reviews” feature for past events. With these two features, Jukely users can share their thoughts on releases and shows with their friends, and thereby earning DRUMS tokens when their friends engage with the shared content.

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This new incentive system creates value for concert-goers by doing what they already do but don't get paid for: sharing music with their friends. By doing the things they already enjoy doing, they'll be able to earn tokens, reduce their concert spending and attend more shows.

Music lovers will be able to use the DRUMS tokens they earned to pay for their Jukely subscriptions to go to concerts and get priority standby for in-demand shows.

As an additional application of the DRUMS token, concert-goers who hold extra tickets to shows they can no longer attend will be able to trade in their tickets for DRUMS tokens from Jukely. This solves the secondary market problems of finding or not finding a buyer, and risking those tickets' value never being actualized in some way. The number of tokens users receive will be determined based on the secondary market value of their tickets, up to, and never higher than, face value.

B. Artist Value Proposition

Artists spend a significant portion of their income on ads to promote their music releases and tours. In the DRUMS token system, artists will be able to create missions on Jukely for this purpose. Jukely users will be matched with these missions based on their music tastes so that they can promote the releases and share with their networks. Users will be compensated for their shared content relative to the engagement they generate in the form of DRUMS tokens.

In this way, artists will be able to shift their marketing efforts from ever-increasingly expensive ad networks to actual music lovers using DRUMS tokens.

Artists can earn tokens by exchanging tickets to their tours and shows. In additional use cases, artists can receive tokens from promoters who have booked the artist for their shows.

In summary, the value generated for artists: less cash spent on traditional ad network marketing, more authentic promotion from music lovers, more new listeners, and more concert attendees from the Jukely concert subscription service.

C. Promoter Value Proposition

Event organizers, promoters in industry parlance, take on a high risk in putting on shows and earn relatively low income proportionate to the total production. Case in point, the concert business of the world's largest promoter, Live Nation, has been operating at a loss every year for several years running^[6]. Every show is risky and has a thin margin for error. An event

that does not work out can result in significant losses for the promoter. For shows that lose money or barely break even, artists will still get paid their full fee most of the time and organizers will end up absorbing the losses.

Currently, promoters give Jukely's subscription service discounted tickets for their shows that are not selling out. The new DRUMS token system will start rewarding them for the value they create in the ecosystem for those discounted tickets. For every single \$USD of value they provide, they will earn the equivalent of DRUMS tokens. The more discounted ticket inventory promoters contribute, the more tokens they will receive.

Promoters will be able to create missions on Jukely for their upcoming events. Jukely users will get matched with these missions based on their music tastes so that they can "hype" them and share with their networks. Users will then get paid for their work relative to the engagement they receive in the form of DRUMS tokens.

The most innovative and exciting component in this new ecosystem is the ability for promoters to pay artists using DRUMS tokens partially, or in full. Once it is demonstrated to the artists that the DRUMS tokens are useful for them to promote their music releases and tours within the ecosystem, the artist marketing teams will start utilizing the tokens to generate promotion on the network. At this stage, promoters will be able to include the DRUMS tokens in their booking offer to the artists.

In summary, the value generated for promoters:

- More attractive artist offer packages now that they can include DRUMS tokens in their artist offers.
- Less cash spent on traditional ad network marketing to promote their events.
- More efficient and authentic event promotion from music lovers while utilizing network effects of friends going to shows together.
- More concert attendees from Jukely's subscription service.
- Additional income generated in the form of DRUMS tokens which replace the zero revenue of unsold tickets.

IV. TOKEN DYNAMICS

Currently, Jukely has a points system for its subscribers and a promo credits system for promoters and artists. Subscribers can earn these points by promoting music releases and events, then use them to jump to the top of standby lists for high-demand shows. Subscribers also have the option to purchase additional

points from Jukely if the amount of points required to jump-to-top is greater than the amount of points they currently have. Promoters and artists can earn promo credits for the value of the concert tickets they provide to the Jukely subscription platform.

In the new tokenized ecosystem, all points and promo credits will be converted into DRUMS tokens. Earnable tokens will also be extended to Jukely’s free tier base of approximately 400K users to generate more widespread promotion activity on the platform. Going forward, any music lover will be able to sign up with Jukely without requiring a credit card or the need to become a subscriber. Users will be able to complete missions for promoting concerts and music releases to earn tokens. They will be able to use their tokens towards a Jukely subscription or use them to jump-to-top of the standby for in-demand shows.

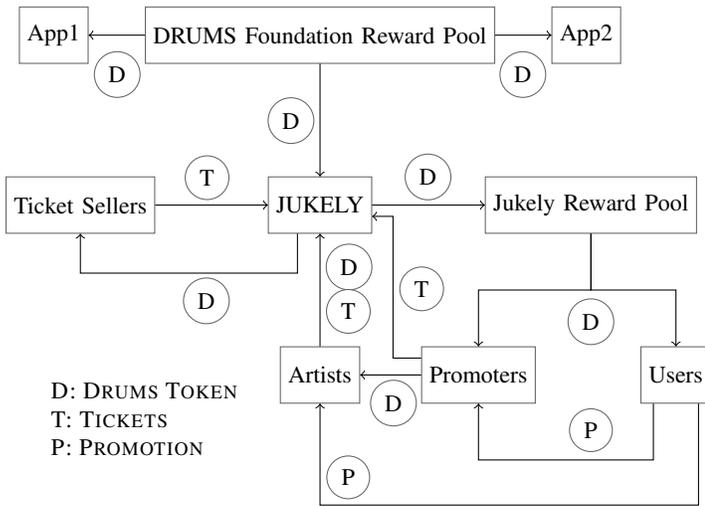


Fig. 1. DRUMS Token Ecosystem

Jukely’s promoter partners who currently earn promo credits for the ticket discounts they provide to Jukely will have their promo credits converted to DRUMS tokens. They can then use these tokens to receive additional promotional value from Jukely, and include them in their booking offers to artists for a more attractive offer package for their shows.

Artists who have received DRUMS tokens from promoters as a part of their booking negotiation will be able to use them to receive promotion from Jukely users by creating missions for their music releases and tours. Artists can also earn tokens on Jukely by providing ticket inventory for their tours.

V. DRUMS FOUNDATION REWARD POOL

DRUMS Foundation will receive 65% of all token supply. All apps, platforms and other participants who add value to the ecosystem will receive rewards from

this reward pool proportionate to their added value. Each year 20% of remaining tokens will be distributed as rewards to the participants of the ecosystem.

Jukely will be the first platform to receive tokens from the reward pool. As more participants get added, the reward pool will be divided among them proportionate to the token transaction sizes generated by each participating app/platform.

Jukely will distribute the rewards it receives from the DRUMS foundation to its participants accordingly. Tokens will be distributed daily to users and promoters from the Jukely reward pool. Users will receive tokens daily, based on the promotion engagement they earned in the preceding 24-hour period. Promoters will receive tokens based on the promo credits they earned in that day via the ticket value they provided less any promotional value they received. Here are the variables that factor into the calculation of rewards for users and promoters.

D_{pd}	Promoter Daily Ticket Discount Used
C_{pd}	Promoter Daily Promo Credit
M_{pd}	Promoter Daily Promotion Received
R_{tu}	Reward Tokens for User
R_{tt}	Total Daily Reward Tokens
E_{tu}	Earned Tokens for User/Promoter
E_{tt}	Total Daily Earned Tokens
W_u	Tokens Earned To Date by User/Promoter
W_t	Total Tokens Earned To Date

Promo credits for promoters get calculated by subtracting promotion received from ticket discount provided and used by Jukely subscribers. These credits then get exchanged into daily tokens earned.

$$C_{pd} = D_{pd} - M_{pd}$$

Users and promoters will be rewarded with bonus tokens from the daily bonus pool, proportionate to the number of total tokens they have earned to date and tokens they earned on that day.

$$R_{tu} = R_{tt} \cdot \frac{f(E_{tu}, W_u)}{f(E_{tt}, W_t)}$$

The daily rewards given out to users and promoters will regularly increase with the total promotion and discount value that gets added to the ecosystem.

VI. MONETARY POLICY

DRUMS tokens will not be offered in an ICO. They will only be earnable by the participants of the DRUMS ecosystem. Total supply of tokens will

be 100,000,000. Jukely will receive 30% of the token supply as the founding member of the DRUMS Foundation on a 30 month vesting schedule with 1% vesting each month and will kick-start development of DRUMS technology and growth using its platform.

The remaining 70% of the token supply will be issued to the DRUMS Foundation. The foundation will release this supply to the DRUMS Foundation Reward Pool at a rate of 20% of remaining supply per year.

VII. CONCLUSION

The spending that's being shifted away from ad networks to actual music lovers who deliver more affordable and authentic marketing value to promoters and artists in a token economy is a unique approach we believe will energize the promotions of music releases and concerts. As a result, concerts will become more affordable for music lovers by way of an improved Jukely subscription service with increased inventory. Concert-goers will end up going to more shows while the ecosystem enables greater income opportunity for artists and promoters.

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