# Green Paper - Rough Draft 2017-12-6

(In the interests of a timely release and feedback from more people, this "green" paper is a rough draft of the monetization for MediaCoin.

#### MediaCoin Value to Market

In the past, it wasn't feasible to securely deliver content for Playback. This insecurity led to user accessing a URL and making unlimited copies of the content. Not only does this violate copyright infringement law, it also deprives the artist the opportunity to monetize their work. The Mediacoin platform has adapted the security model to ensure encrypted files are delivered efficiently and decryption keys are sold into a secure sandbox.

Within the framework of our encrypted delivery system, our media formats are focused primarily upon video and audio playback. We will continue to pursue additional streaming content with a potential entrance into the client software market. To enhance the service we provide, all MediaCoin content will be catalogued, reviewed for proper copyright licensing, sampled for quality and ultimately encrypted. As the process is automated over time as a result of the initial editors of the content verifying it, the uploaders of the content (who will be referred to as the "artists") will choose the price of their content and ensure proper usage rights (examples would be a charge per play or per session.) A per session song on repeat loop would be charged only once and 100% of the price selected by the Artist will be paid. However, a minimum of 10% will be paid as referrals to the playlist creator, artist referral, user referral, and user referral referrer.). As we scale larger and artists want to sign directly with us, we will offer the commercial license as a direct sale and provide copyright protected services utilizing our proprietary technology. A per file fee will be assessed, in addition to the artist fee, based on the size of the file and the delivery costs if necessary. Please note that a "per-play" license with the file saved in browser cache will not be charged a delivery fee for repeat play, but will be charged a license for each play.

A revolutionary approach we are bringing to the music and media industry as we monetize MediaCoin is utilizing "tokens" as the traded current of value. Tokens are representations of value, and can be purchased or sold for cryptocurrency and major currencies. The business model for Mediacoin is built around providing 100% artists payout with \$0 artist fees using cryptocurrency. To summarize, a user would sign up for a Cryptocurrency Exchange, providing personal identification equivalent to opening a bank account, purchase Ethereum (ETH) or Ethereum Class (ETC), withdraw funds to a Wallet and finally interact with a Smart Contract to receive Tokens. On our website, will charge a premium for buying and selling our Tokens directly to users. The rate will be based on the Exchange rate, with approximately 20% increase above the Market Rate on Exchange to purchase, and 10% below Market Rate to withdraw Tokens as currency.

## Freemium

A user of MediaCoin will have the opportunity to opt-in to earn token without payments. Each network, song, playlist, and artist, and commercial license referral will be the primary methods we advocate. In addition, to provide additional revenue streams and continue to expand our operations, we will support an opt-in advertisement view, including incentivized behavior (such as mobile phone app installations and game playing). The tokens that are earned in these ways will not be segregated but will form the foundation of a freemium consumption model. Adblocker rewrite rules installed as a browser extension with limited insertion and a hidden earn-per-click model will be Freemium with minor development.

Since most token based platforms regularly destroy their token as a way to claiming value by the network, we will not mint new token and only "burn", or destroy tokens. Tokens will migrated to our Quantum Safe blockchain. Participation in both the ETH and ETC markets can be problematic within the context to exchange participation. We fully expect to offer ETH-tokens and ETC tokens on their respective exchanges. Trading will allow for price parity as the ETH-token will ultimately become phased out as we deploy and implement our Quantum Safe Blockchain. New sales will be exclusive to the ETC-token and repurchases will be available for users holding ETH-token. If regulation is passed that severely impacts cryptocurrency (which is considered highly unlikely as result of current laws and regulations passed within our domicile), we are prepared to offer an "in-house" exchange and separate the value of the token from cryptocurrency.

## Network Value

The network and taken valuation is based on the principle that a medium of exchange has value between users. As the perverseness of cryptocurrency grows and more goods and services are bought and sold using cryptocurrency as the means of exchange, an increase of liquidity will result. Our strategy will attempt to move (in bulk and new development) the assets of artists into a network available to users of cryptocurrency.

The Network Utility (n\*(n-1) users the proceeding equation to reflect the overall value of the the network. This concept is widely known but is not clearly understood. The value of the network is that it scaled exponentially based upon the number of participants, known as nodes, in the network. The business and network model that we have implemented recognizes that participants are not a single case node but users participating together. Participants will be rewarded for their common behavior in the network and as more data becomes available to map behavior, we will implement practices to reward such behavior.

The initial mode of monetization for MediaCoin will be the use and delivery of content. Both Blockchain "Gas" and data transfer fees will be assessed and included in each total.

Monetization will occur as a result of these different Phases.

#### Phase 1 Network:

Music, Movies, TV, Webcam and Streaming. We are, at the moment, acquiring licenses for music, movie, and TV shows to ensure a full lid of content. Our users will also be able to utilize our secure Webcam services and hence will have access to all streaming media for personal preference and for enhanced business communication (our webcam).

## Phase 2 Network:

File transfer network payments and Paywall services. Our secure file transfer of network payments and paywall services allow for efficient and secure resources for users to transfer files. Our paywall services will allow users to preview content but will allow content creators the opportunity to monetize their content as users will have to pay a fee to view the content in full.

## Phase 3 Network:

Shareware distribution, payment and licensing, Bandwidth sharing between devices (Share Cellular data for pay over bluetooth, etc), with Tunneling and relays (Tor style, but with 0-2 hops).

Our shareware distribution allows for users to view a trial version of content before purchasing the full version. Content creators will have the opportunity to utilize our Shareware software to both license and accept cryptocurrency payments. We will ensure that there is sufficient bandwidth sharing between devices, such as media sharing over cellular networks, to provide an optimal experience using our networks. Using data will also allow users to pay over bluetooth, a significant step in the convenience of payment.

#### Phase 4 Network:

Bandwidth and relay mapping
Discovery and announce (with gamification examples)
Private transactions between users
Decentralization using blockchain to replace token
Quantum Safe Cryptography

Our Phase 4 network will allow our users the ability to optimize their bandwidth and relay mapping. Artist will be able to announce their additions to the MediaCoin library and because of our search optimization algorithms in place, our content consumers will able to easily locate and purchase content. We have a secured platform for private transaction, primarily focusing on the decentralization of blockchains to replace tokens and our secure Quantum Safe Cryptography will allow for users to securely purchase streaming media.

# **Phase 1 Network Payments**

The income for our artists will focus upon these factors:

90% to the artist who has created and published the media

3% to the user who has referred the artist

3% to the user referral for the specific referrer

2% to an Artist who provides the referral

2% to the DJ who has placed the artists content on their playlist (or artist if not actual playlist)

If no referral, the unassigned percentage goes to advertising for more recruiting. This advertising becomes the referral partner. Untracked referrals (user deleted the referral code) get smaller sign up bonuses than tracked referrals.

In regards to derivative works, which includes speculative design and copyright varies by media type, we propose the following:

Original content artists will select their fee and any and all derivative works inherit their pricing from the original work. If there is Proper attribution and use of 'in network' content, this reduces fees and increases pay. After the licensing costs are determined, the bonus is added to arrive at a total cost. Outside network fees that are not 'normative use' will have overestimated costs at launch, reduced to actual costs and retroactively paid. Regionalization aggregates pre-agreement licensing, cost reduction and fair use will be explored per locality.

5-100% of normal fee, based on 'normative use' interpretation for each media type

10-30% bonus to editor (commentator, remixer, promoter, or other role)

4% bonus of editor Referral for artist

3% bonus of editor Referral for referral

3% bonus of editor playlist or link

## **Funding Wallets**

It is vital for to understand that new users are paid an initial balance for plugin install and account creation.

10-500 Tokens will reflect an initial value of 500 tokens. The incentive by token will decrease as the token value increases relative to US dollars.

There will be a bonus of +5% for any user referral, which requires wallet activation. In addition, the following percentages reflect additional payments:

5% Referral for Earnings (Based on advertising partners, incentives, but not DJ or duplication of other payments)

10% Deposits Referral (Based on our fee, not total)

5% Deposits Referral for Referrer (Matching reward using same calculations as above)

If there is no referral, the initial balance is half the normal rate. Accounts inactive for 6+ months may have their referral payments folded up one layer, as a secondary anti fraud method. It is imperative to note that users who create a new account to only refer themselves. Any policy changes would only be made after simulation and evaluation on the impact to the total network.

Any Television, Anime, Movie show licensed will show the following income:

97% rebate for prepayment

1.5% Referral for content

1.5% Referral for referrer

Any Television, Anime, Movie show income published will reflect the following income:

90% to the artist that published the media.

4% Referral for artist (Introduction of artist)

3% Referral for content (Link to content)

3% Referral for referral (Introduction of content referrer)

Every data transfer will have a delivery fee, based on storage, requests and bandwidth. The license key

will be delivered after the data transfer fee is paid. Since all content is encrypted and licensed, sharing files for upload will be directly paid starting in Phase 2. A healthy network in Phase 1 will use prepayment for file storage and sharing.

## Data transfer (phase 1):

90% rebate for prepayment

5% Referral for content (DJ, outside link, reviews)

5% Transport Protocol Handler (supernode, DHT node, IPFS DHT, etc that supports mapping from request to delivery. Responsible for key delivery upon completion )

# **Phase 2 Network Payments:**

90% for file delivery, split per chunk of data.

5% Referral for content (DJ, outside link, reviews)

5% Transport Protocol Handler (supernode, DHT node, IPFS DHT, etc that supports mapping from request to delivery. Responsible for key delivery upon completion )

#### **Gas Estimates**

Initial Transaction costs ("Gas") are calculated by processor time, storage, and various factors using a specific quantitative metric. Phase 1 will, at minimum, rely upon direct costs for Gas payments. Aggregating transactions will lower costs, and urgent transactions will increase costs. Multiple techniques will be employed in Phase 2 to lower Gas costs for users and the network as a whole.

# Pay Wall services

Many news and article sites require direct payment or an adblocker to access their content. Since our user base already has a browser plugin, very low costs, opt-in behaviors, and easy payment options, MediaCoin is positioned to act as a payment gateway for "pay per view" or "pay for access" services. While many of these services require a subscription, we can seamlessly function as an opt-in behavior system or token based payment method.

## **Phase 3 Network Payments**

5% Referral for access (no pay for local discovery, pay for DApp mapping of access, etc.) 5% Transport Protocol Handler (exit Gateway Handler for request, may include DNS, bundling UDP in TCP, packing files, etc)

5% Traffic Tunneling per hop, by client request (0-3 hops)

75-95% for network access, pay per MB transferred

## Software Licensing

In general, software licensing is a more complex topic because of the multiple type of licenses that must be supported. The development of a secure software delivery platform is complicated since there must be deep integration within the software product. A purely superficial license key solution is easily bypassed through software disassembly. Office software, iPhone and Android apps, Shareware, MMORPG game titles, online console games and more will be supported. However, licensing

agreements will often need to be established first. Subject to the terms of the content creator, we will share what is fiscally viable for download and promotion.

## Phase 4 Network:

Private transactions on Quantum Safe Blockchain

The creation of blockchain is dedicated to a network is a significant step forward in the long term advancement of the network. Tokens will be initially redeemed for transfer at ICO rates, and later at market rates. This conversion is the only case that any tokens will be destroyed by the network.

Decentralization using blockchain to replace token transactions

MediaCoin Tokens will be maintained and traded indefinitely. Moving operations into Blockchain ensures continuity of the network and immutable resistant to outside interference. Guidelines protecting users and artists should be well established, with multiple access points. Blockchain based publication creates further opportunities and more freedom in implementation.

Proof of Work for network shares in GPU will be the bulk of the initial miner reward. The goal is to transition the entire network to collection and distribution of transaction fees without mining. Mining routines in GPU will mimic transactions with optimizations in mining software lowering transaction costs.

## APPENDIX A - Zero Sum Game

Cryptocurrency markets are a "Zero Sum Game" similar to stock equity markets. Every dollar 'earned' in cryptocurrency and equities trading comes from another trader's 'loss.' A healthy ecological system and a healthy market bear similarities as "Living Systems," as detailed by James G Miller in 1972. Cryptocurrency, especially as a fledgling market, must be intentional, cognizant and careful to obey the Natural Limits (Natural Capitalism) as the system grows. This 'green paper' is focused on detailing the financial systems required to make cryptocurrency a sustainable system with lasting growth.

The main difference between the markets is the input and output to the whole system. Equities receive system input as funds from IRA, mutual funds (especially tax free profits as "passive foreign investment instruments") and indirectly through some option vestment plans and dividend payments to shareholders. Cryptocurrency has direct goods and infrastructure building but both systems generally remove more value through fees than the direct investment in liquidity needs.

With Cryptocurrency as a Zero Sum Game, it is important that the output costs are minimized and the input income is greater than the output costs. Without a careful consideration of income > cost, then the resulting market is often referred to as a speculative bubble because it relies entirely on new investment to fuel the ongoing costs. When the investment input slows, returns diminish and large withdrawals at that stage will cause a speculative collapse. When income > cost, the investment input is attempting to capture long term income with equity investment. For the health of the overall system, it is important that projects with costs vastly exceeding income collapse quickly to avoid risk and weakness in the larger system. Equity investment in infrastructure is a necessary step to capture long term value, but it can not fix situations where cost exceeds income. If a large investment is able to capture a lead in a marketplace, the project must gather value and convert it to income, or sell their network to a system that can gather value.

Appendix B: Aggregate Cost Averaging and Behavior Valuation

The micromanagement approach to costs and income is very significant, because it is impossible to lose money on every transaction and yield an overall profit. The converse statement is true, it is possible to accrue revenue on every transaction and not yield gross profit due to infrastructure, licensing and total system costs.

MediaCoin takes the approach that earning income on every transaction while minimizing infrastructure costs will yield total system profit. Unlike most projects, MediaCoin will avoid aggregates of cost, profit and transaction volume for a total system gross profit. Many projects take the approach of advertising "screen real estate" to gather income. The expected income is based on the total screen real estate of all combined users viewing advertisements. If the advertising income is higher than the total system costs, the project yields gross profit. As the cost of providing services to each individual user is minimized, the system costs go down. If the advertising yields a profit to the advertiser, the advertising becomes sustainable and so does the projects that rely upon advertising for income. It is not possible to overstate the profit significance of only providing services to each user based on the actual gains to the entire system. Each transaction and each user will be profitable, with the exception of initial cost of user acquisition. Infrastructure and some licensing will primarily be paid for with the Initial Coin Offering and ongoing sales of Tokens.

Subscription models for content have disproportionate usage. 52% of all adults who read the news never subscribe to a particular newspaper. The delivered value to users who pay for monthly subscriptions but infrequently use them will lead to user dissatisfaction regardless of quality of service. Creating artificial barriers to cancellation creates a secondary consequence of alternative markets. As the trend of cellular service requiring a 1 year minimum contract progressing to a 3 year minimum contract, the market for pay-as-you-go service without cancellation barriers grew in correlation.

MediaCoin's use of Tokens to accurately represent value allow us to map costs and offer peers payment for lowering costs. The main cost for streaming sites is clearly bandwidth, and members who offer their bandwidth to peers can be paid accurately per megabyte delivered for data transfer. Use of bounties and tokens for services will allow us to spend tokens instead of venture capital for behaviors that increase the value of the network. We intend to reward our community for contributing to our success, rather than exploit it as a no cost means of providing support without reward.

Accurate Cost Measurement and Behavior Valuation will allow our company to recognize inefficiency and reward efficiency while increasing the total value to all network participants.