Current

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Nicholas McEvily Daniel Novaes Kiran Panesar Joshua Moyer Amy Karr Brian Ng William Ryan https://tokensale.current.us/ White Paper Version 1.2 January 26th, 2018

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Humble Kendrick Lamar

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For You

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Executive Summary



Get paid to stream from networks like Spotify, YouTube, SoundCloud, and more in an all-in-one personalized experience.

Current is creating a digital token that uniquely rewards a person's time, money spent, and data shared during the media streaming experience. This token can be used to purchase a broad range of products, services, and in-platform advertising.

By consolidating popular media networks into one place, Current already provides more than 200,000 users with a more convenient search and discovery experience. With the launch of the platform token, users will be rewarded for streaming content from their favorite networks like: Spotify, YouTube, SoundCloud, and more.¹ The platform combines behavioral data points surrounding the types, times, and topics played by each person across multiple networks to serve up better recommendations than any single network alone. Blockchain technology allows for a new system of transparent accounting that is needed for the instant valuation of time, data, and attention. The Current protocol aligns the interests of all stakeholders in the media consumption cycle to create network effects that drive adoption. By creating a new medium of exchange, Consumers get more choice in how they pay for media; Creators and Curators get a new form of compensation, and Advertisers get more transparent accounting and audience information.

The protocol interacts within the Current platform in addition to any other host media network. This introduces a new revenue stream and incentive mechanism for the host network giving it the ability to scale effectively. Over time, developers will leverage the identity profiles created for future blockchain based systems.

Vision

Attention and personal data are now the most important commodities on the internet. Media, both serves as an effective place to create an attention/data economy and is primed for blockchain disruption. By taking a passive habit and correlating value to it, Current is setting a precedent in today's digital landscape. Users should get more than just entertainment, creators should get a bigger cut of revenue, and curators should get paid for finding the content you didn't know you loved.

Media for Web 3.0

The web we know today was built on the personal data and time of the unwitting consumer. Today, just four companies own the internet's data.² The next evolution of the Web will recognize the value of people and redefine the value exchange between consumers, and corporations.

When we set out to build this ecosystem, we put you in mind: the everyday streamer. We considered the variety of media you stream and the various networks you have accounts on, and built an agile flexible platform that adapts to culture quickly. We didn't want you to make any sacrifices, so we integrated with the most popular networks. You want to control who your data is shared with and how it's used, so we wrote win-win smart contracts that give you choices.

The Streaming Generation

With an estimated buying power of \$44 Billion, Gen Z is spending more than 5 hours per day on their phone,³ making them well positioned for cryptocurrency adoption. By designing our platform with the most digitally active generation in mind, we differentiate ourselves from the infrastructural protocols developed to serve the "initial wave"⁴ of avid users and delivers a valuable new audience to the world of blockchain.

Gen Z and Millennials are having deeper and more frequent interactions on video and music services than ever before. They are more likely to search YouTube for a given question then to Google it.⁵ Armed with an acute awareness, and a strong interest and understanding of the digital landscape, these groups will represent the first generations who will be immersed in blockchain products and services. In many cases, Current will be the first digital wallet the mainstream public will own.

Introduction

Designed to evolve over time, the Current ecosystem is being built in a hybrid fashion, with both on-chain and off-chain solutions to accommodate shifting market dynamics in the blockchain, media and crypto industries. In the short-term, the proprietary algorithm will create personalized content recommendations across networks in a universal media platform. The Current protocol and token will introduce new revenue streams and incentive mechanisms that will initially be launched within the Current platform and later be made available for developers to leverage in their applications.

Traction: A Universal Media

Platform (Released on iOS, March 2017)

During this phase, Current is solely sourcing content from third-party networks like YouTube, Spotify, Soundcloud, Internet Radio etc. ensuring adequate supply of media, to accelerate growth and meet user demand. At this stage, the goal was to find productmarket fit to establish a strong foundation for the product. With over 300 million songs and over 1 billion videos, over 200,000 people have used Current to listen, watch, and interact with media. The average user spends over 18 minutes per session and our Day 30 retention as of Q4 2017 is over 35% without any incentives built into the platform, well above industry standards at this stage. ⁶

Scale: A Universal Media Protocol and Token

The second phase is focused on building a protocol and a utility token that democratizes the value created in the media consumption cycle; shifting benefits from advertisers and intermediaries to people who are playing, creating, and curating media. Launching initially on the Current platform, the protocol will be built to support usage within external networks. This offers the host network a new incentive mechanism and revenue source, as well as a compensation model for their users. In turn, the pool of token holders is expanded along with the value of the ecosystem.

The protocol records transactions on the blockchain that attest a user's contribution to the network (by consumption, or by curation and creation) and a smart contract distributes CRNC tokens in response to that contribution. In order to handle the scalability bottlenecks, while maintaining trust within transactions, we will consider "state channels."

The Future Of The Current Ecosystem

In collaboration with independent media platforms, the Current protocol will be forked to broaden the available market share and create sub-tokens for each media ecosystem. Each sub-token will have its own distribution rules and mechanics that are customized to the goals of the media platform. To avoid negative impacts on the Current ecosystem, the sub-tokens will have individual exchange rates related to the core network token and internal dynamics that are insulated by the inherent nature of the sub token. By creating a protocol and ecosystem for media platform tokens to exist, Current is able to take a larger stake in the streaming of content online, on any platform.

As blockchain technology continues to mature and adapt to market needs, the token, the platform, and the protocol will continue to leverage bleeding edge technologies to maximize value for all participants. Three such strategies include:

A Superior Identity Profile For Blockchain Based Applications

By aggregating the given identities of a user from several networks, Current is in a unique position to develop a robust preference and identity profile. This authentication layer allows any third party application to utilize the user's identity attributes and associated data without taking ownership of it.

Decentralized Storage Infrastructure Alongside Centralized Networks

The platform will provide decentralized media infrastructure to host content across millions of devices rather than on proprietary nodes. Fully decentralized media distribution requires significant and rapid industry acceptance.

Without it, consumers are left with a limited content library. Current gradually leverages blockchain as the general public further adopts cryptocurrency and the media industry transitions to a more decentralized infrastructure. This approach allows the platform to gain momentum and reduce barriers to entry on both sides. Creators benefit from an established group of token holders within the network, and a significantly higher portion of revenue. The platform will leverage a protocol like IPFS or Storj as a directory for data storage and Ethereum smart contracts as the distribution logic.

Ethereum Blockchain Scalability via State Channels For The Media Industry

Using state channels, Current can build upon Raiden, specifically with the media industry in mind. Raiden's launch has been delayed due to the fact it's aiming to build a universal solution that works in several different capacities. We believe we could add value to the industry by launching a media specific version any developer could build upon.

A New Way to Play Media

The Current platform provides a more convenient and thorough media search and discovery process by consolidating disparate content sources into one place. Aside from reducing the number of apps needed to play music, video, podcasts etc., the platform has more data points available about the media types, times, and subject matter that a person experiences and can generate recommendations better than any single network alone. Current is available with 8 integrations and intends on integrating more services that host podcasts, audio books, television shows, and movies.

More Convenient Streaming

Unlike conventional content networks like YouTube or Spotify, which are limited by the content hosted on their platform, Current can access the content libraries from multiple services through Application Programming Interfaces or APIs. An API is a set of routines, protocols, and tools that govern the interaction of software components.⁹

Keeping Up With Culture

Current integrates with external media networks to meet the demand for popular media only available on proprietary networks. Using third party libraries provides Current with an unparalleled agility to add or remove libraries as they fluctuate in popularity. For instance, live streaming, virtual reality and augmented reality will become more ubiquitous in the coming years; Current is well suited to integrate the most popular content networks that serve those types of media.

Reducing Barriers to Ownership

One of the strongest attributes of CRNC is its accessibility and immediate impact to users. Most exchanges and crypto-enabled services require a lengthy registration process, some form of investment, or hardware for mining. Current allows users to start earning CRNC tokens immediately without any barriers to entry. Another issue that deters new entrants into the market is legibility of the application. Ripple, Tezos, and many other blockchain protocols have very complex solutions that require a certain technical literacy and lack a broader relatability.

With our hybrid approach, we're able to garner broad adoption using our existing audience and their daily streaming media habits through a simple user experience and wallet integration, removing all technical complexities associated with the adoption of cryptocurrencies. Lastly, the other barrier to entry revolves around accountability. Many token sales are based on theoretical principles without any sort of product in market.

The Current Media Platform launched the first stage of its product to the Apple App Store in Q2 2017.¹⁰

Better Recommendations

An algorithm can consolidate a seemingly limitless content library into a subset of options that users can understand and make choices from in moments. In order to make any given list of information more manageable, a recommendation system must model users' preferences accurately, uncover hidden preferences, and avoid redundancy.

Current's proprietary recommendation algorithm leverages both Content Based Filtering and Collaborative Filtering to determine in what media users are most interested. Using machine learning and neural networks, our algorithm will self-amend and change incrementally based on the relational information it defines.¹¹

Building a Preference Profile

A *preference* in this circumstance is defined as a combination of inputs / actions that jointly indicate a greater enjoyment of one media item over another or others.

Media items are defined by their metadata: artist name, album name, song length, beats per minute, genre type, mood type, era of origin and social data including likes, follows, comments, and shares and other qualities. Types of media are broadly represented by various audio and visual formats including music, video, podcasts, posts, articles, audio books, TV shows, movies and other media yet to be popularized. The Current system begins building an individual's preference profile at the start of a user's journey, after they select a genre from a predefined list. By finding other content with the same, or similar genre, the content filter provides an initial set of recommendations with varying degrees of strength. The system funnel further analyzes each media item to create a relationship between one another and make recommendations based on strong attributes like user plays, saves and skips.

Over time and with the addition of profile information from third party integrations, the preference profile can become more robust than a similar model built on any single external network. As new types of media are added to Current and users interact with a more types of content, our preference profile will be in a unique position to identify commonalities between different types of media, such as, podcasts to videos, audiobooks and articles and so on.

Proprietary Recommendation Algorithm

Our recommender system is based on two filtering methods: Content Based Filtering and Collaborative Filtering. While Content Based Filtering offers recommendations of new tracks similar to a user's past consumption history, Collaborative Filtering offers recommendations to a user based on what other, similar users listened to. While Content Based Filtering uses features generated from textual metadata (genre, category, keywords, embedded description words), Collaborative Filtering calculates the correlation between the vectors which represent user consumption history.

To improve efficiency with sparse data, the Current algorithm measures the cosine similarity between two vectors (representing users or tracks). Using a matrix of users and tracks the algorithm measures the magnitude of a user's perceived value of the media through the vectors in a corresponding graph. We then analyze the cosine distance between two vectors to make recommendations:

$$cos(\mathbf{i}, \mathbf{j}) = \frac{\mathbf{i} \cdot \mathbf{j}}{||i|| * ||j||} = \frac{\sum_{u \in U} r_{u,i} r_{u,j}}{\sqrt{\sum_{u \in U} r_{u,i}^2} \sqrt{\sum_{u \in U} r_{u,j}^2}}$$

Recommendation Algorithm Runs Off-Chain

The user is the magnitude of a track play, where "i" and "j" are two users and this formula is applied to a specific track. The smaller the distance between two vectors, the higher the similarity between two tracks or users.

To further improve our recommendation accuracy, Current will also employ features generated by convolutional neural net and autoencoder models in our Content Based Filtering algorithm.



A Utility Token for the Media Industry

Purpose of the Protocol

The primary objective of the protocol is to evolve based on market adoption, and therefore will be rolled out incrementally. The initial function of the protocol is to reward participants of the consumption cycle in three steps: (1) verify the initializer; (2) calculate the value of the action to the network, and (3) calculate the appropriate token reward to distribute to the contributors. At the outset, Current will have a main initializer that is triggered by the consumption of more than 30 seconds of play (consumption is also referred as "mining" within the Current whitepaper).

Sub Tokens and Network Tokens (CRNC)

Current will stake a portion of CRNC for each newly issued platform sub token allowing token immediate liquidity to occur for any network participations. Sub tokens can then be instantaneously traded for CRNC or any other token within the ecosystem.

Current will be integrating with the Bancor Protocol in order to provide liquidity and formulaically determine the price of sub tokens. The CRNC token mining pool will incentivize large media networks to use and implement the Current protocol by aligning incentives between host platforms, consumers, creators, and curators. This allows the protocol to achieve mass scale and more comprehensive datasets around user preferences and trends. Current will stake a portion of CRNC for each newly issued sub-token allowing token immediate liquidity to occur for any network participation. Sub-tokens can then be instantaneously traded for CRNC or any other currency within the Current/Bancor ecosystem.

Current creates an easy to use onboarding that brings traditional media networks onto blockchain technology, adding immediate value to their company, while bringing them up to date with consumer expectations. By creating an eco-system for media, Current is able to bring an immediate value to all media online and own the landscape of how media interactions are rewarded, no matter the platform.

Ethereum Based

Tokens will be implemented on the public Ethereum blockchain as an ERC20 token. With incremental advancements, one of the largest developer communities, and top-tier backing the Ethereum blockchain has become the industry standard for issuing custom digital assets and smart contracts. The ERC20 token interface allows for the deployment of a standard token that is compatible with the existing infrastructure of the Ethereum network (i.e., wallets, dev tools, and exchanges.) Although limitations in transaction speed exist, leveraging off-chain payment channel networks such as Raiden address these bottlenecks. 12 Advancements such as these allow platforms to track microtransactions down to the second.

CONTINUED FROM Token And Protocol Dynamics

Current only measures consumption on multimedia networks. As of now Current does not plan on measuring contribution on platforms such as Facebook or Twitter. Alternate initializers will be considered in the future. Once the initializer is verified, the contribution is attributed to the appropriate participants (see page 13 - Token Value Flow).

The Importance of Cryptocurrency Ownership

At large, cryptocurrency ownership increases participation in blockchain enabled products and propels advancements throughout the industry. Within Current, scaling the user base is a key factor in the valuation of CRNC. The larger the population of holders, the more momentum the technology can gather. The favorable reception of bitcoin in financial markets has led to a certain foundational strength on which to build upon. Going beyond transparency, cryptocurrency allows for real-time payments down to the fraction of a cent, which offers more control to both the subscriber and provider like never before.

Token and Protocol Dynamics

Current's blockchain attribution protocol accurately and transparently compensates contributions to the recommendation algorithm and overall growth of the Current ecosystem. A token is "mined" when a user plays media within the platform. Each token that is mined is split amongst the the creator, curator, consumer and potential referrer.

Stakeholder List

Consumer

The person playing the media and paying for subscriptions

Curator

The person organizing the playlist or bringing the content into the network from an external source

Creator

The person or group responsible for the content being played

Referrer

The person responsible for bringing the consumer onto the platform

Growth Pool

The pool of tokens that ensures liquidity and proper supply in the total token supply pool

Content and Value Flow



Block Reward Calculation

In order to ensure liquidity and supply, the *Block Reward (Br)* calculation maintains a ratio of available supply to demand. Each block is eq-ual to 3600 seconds or one hour of consumption (mining) done by a consumer. With every 100,000,000 blocks mined, the block reward changes in proportion with the number of tokens left in the system. This is known as a *Block Cycle (Bc)*.



Variables

Br = Block Reward **Tp** = Token Pool

To = Token's Out (During a single block cycle)

Cp = Growth Pool (During a single block cycle)

Bc = Variable which increases as the number of block cycles increases, rate TBD where inflation > 1, deflation < 1, Baseline = 1

Total Token Supply: 1,000,000,000

Contribution Coefficient (H)

Not all user consumption is equal. The *Contribution Coefficient (H)* is designed to disincentivize illegitimate plays, and to identify the most influential contributors to its network. It is calculated with data points from the Current platform via a centralized oracle operated by the Current Corporation, then injected into the blockchain.

Taper Coefficient

There are many reasons to discourage long, continuous mining. Firstly, advertising research suggests that ad fatigue decreases attention; secondly, we want to discourage consumer fraud where users "play" media without authentically paying attention to it. We define a "session" as a time period of continuous mining with some minimum time apart from the next session. We designed a coefficient function in which marginal reward tapers off as session length increases. The cumulative award then is naturally its integral.

Verifying Play Legitimacy

The play legitimacy likelihood is a coefficient designed to prevent inauthentic plays from mining CRNC. This coefficient will be regularized so that it is consistent across the network in the majority of cases and 0 (zero) for identified frauds on a by-user basis. Our proprietary algorithm solves an anomaly detection problem based on features generated from Current platform usage, like app foreground consumption, advertisement interaction, and session velocity and length. This algorithm is computationally expensive, and presently the required data points are located off-chain. For these reasons, our anti-fraud checks will be performed by the off-chain Current API. We'll consider moving these checks onchain once more of our data moves onchain, and if on-chain transaction costs fall to an affordable rate.

Customer Attractiveness

The customer attractiveness ratio is a coefficient within 0 (zero) and 1 which represents the degree to which the user is integrated in the network, coupled with the likelihood that the consumer notices the ad.

- **1.** Attractiveness of user based on attributes, learnt on data from advertisers and in-platform analytics
 - Country
 - Gender
 - Occupation
 - Age group
 - Income level
 - User preference data
 - App foreground vs background use
 - Calendar access
 - Location access
 - Number of accounts connected - Spotify preference profile
 - YouTube preference profile
 - Third-party preference profiles
- **2.** Likelihood of user interaction and clickthrough with ad, learnt on in-app data
- **3.** Incentives for in-network participation

Similar to verifying play legitimacy, this calculation requires a significant amount of data located off-chain, and would incur large transactions cost if performed onchain. For these reasons, the majority of these calculations will be conducted in an off-chain API.

Total Token Reward

The total token reward is the result of the block reward, time spent consuming media (in seconds), and the user's contribution coefficient

$$Tr = \frac{(S * Br * H)}{3,600}$$

Variables

- Tr = Token reward
- S = Seconds spent consuming
 (Where S must be 30)
- **Br** = Block reward
- H = Contribution coefficient
- **3600** = 1 Block

Participant Token Reward

For calculating the Participant Token Reward given to consumers, curators, creators, referrers, and the growth pool, the following formula will be used:

PTr = Tr * U

Variables

Tr = Token reward given out PTr = Participant token reward U = The portion of the overall token's distribution to participants.

Token Value Flow

The diagram below represents the baseline distribution structure of tokens mined through media consumption. For some media items consumed, the distribution may vary based on the presence or absence of a referrer or curator.



For consumers this is 55%, creators and curators this is 20%, for referrers this is up to 3%, and for the growth pool this is 2%. *When content is consumed and a 3rd party curator is not present, Current is awarded the 20%. **While a creator has less than 36,000 seconds (10 total hours) streamed on the platform their 20% share of tokens will be allocated to the growth pool until their escrow account is minimum is met. ***If a referrer is not present the 3% is awarded back to the growth pool. ***The growth pool will be allocated 2% of each token in all instances.

Example Calculation

Block Reward

Steve consumes 1000 seconds of content and his contribution coefficient (H) is 4.2. The block reward for the block cycle is currently at 0.49 and no one referred Steve to the network.

$$Br = \frac{((Tp - To) + Cp)}{1,000,000,000} * Bc$$
$$0.49 = \frac{((498,989,878 - 8,876,746) + 854,874)}{1,000,000,000} * 1$$

Token Reward

$$Tr = \frac{(S * Br * H)}{3,600}$$
$$0.57 = \frac{((1,000 * .49) * 4.2)}{3,600}$$

He "mined" 0.57 tokens and was awarded 0.313 for his participant reward, which is calculated in the following example.

Participant Reward

PTr = Tr * U

Steve's Token Reward (55%):

0.313 = 0.57 * 0.55

Creator's Token Reward (20%):

0.114 = 0.57 * 0.20

Curator's Token Reward (20%):

0.114 = 0.57 * 0.20

Growth Pool Token Reward (5%):

0.028 = 0.57 * 0.05

Key Takeaways

Current will initially provide a protocol and token that can be used within the Current platform and ultimately on external media partners. Current brings value to all players in the media consumption cycle.

Earning and Spending Tokens

The main way to accumulate platform tokens is by playing media within the Current platform. As the platform increases its reliance on blockchain technologies, stakeholders are impacted differently.

Tokens Earned by Consumers

The amount of tokens earned by the user is reliant on their contribution coefficient and the number of referrals they've made successfully. All users who consume media on Current from any of our content integrations will be awarded platform tokens.

Syncing Media Networks and Preferences

A user's 'mine rate' is impacted by the amount of data that is tied to their account. They can increase this rate by syncing third-party profiles. This incentive increases user inputs and allows the recommendation algorithm to provide more personalized content. As the Current network grows, more value is created and a more robust recommendation platform with exponentially greater content integrations will emerge for users.

Inviting Other Users to Current

A user may invite others to Current and earn up to (3%) of their distribution value of tokens each new user earns in perpetuity. Current may implement a split of the 3% where both the referrer and the referee each get a (1.5%) share of the tokens the new user earns.

Example: Tom joined Current on his own. Tom Invites Steve and then Steve invites Jerry.

Tom = 55% of his TR (Token reward) + 1.5% of Steve's TR

Steve = 55% of his TR + 1.5% bonus of his own TR + 1.5% of Jerry's TR

Jerry = 55% of his TR + 1.5% bonus of his own TR

Ad threshold and Faster Mining

New users will be shown ads until they have 5 tokens in their wallet (or the equivalent of the lifetime value of a free user within Current). Ads will reappear if the user's balance drops below this threshold. Users do not need to trade in tokens to eliminate ads post-threshold. If a user chooses to keep ads activated, this will positively affect their con-tribution coefficient, effectively allowing them to mine tokens faster.



their current Life Time Value

Tokens Earned by Curators

Within Current, users are able and encouraged to curate multiple media streams into Channels. These channels act as "folders" of content from multiple media networks. Current will reward users who curate popular channels within the network by measuring the amount of time spent on their curated media.

The curators get a 20% share of tokens based on the consumption of their channels and playlists. Since consumption is the primary method of measurement for their reward, the contribution coefficient of the users that the curators curate for determines how many tokens the curator will earn per session.

Tokens Earned by Creators

At present, the Current platform provides content through a series of content integrations. Together, these integrations provide Current users with an unprecedented catalog of media. In early 2019, Current will allow for the direct upload of content to its net-work and will distribute that content in a decentralized manner.

To strategically bring creators onto the platform, Current will be allocating 20% of each earned token to the creators of the media consumed within Current regardless of the media item's source network. All earnings are held in escrow until the creator joins the network and claims their wallet. An escrow account is created once a creator has accumulated 36,000 seconds (10 hours) of streaming, until then the tokens associated with these smaller creators will go towards the growth pool. If creators do not claim their wallets within 12 months, a 10% monthly decay rate is imposed. This time limit motivates creators to join sooner and also safeguards the platform from having too many tokens out of circulation. All decayed tokens will ultimately go back to the token pool via the growth pool.

Once on Current, creators will continue to upload their content to their platform(s) of choice (Spotify, Youtube, Soundcloud, etc.) and a user would then consume that content via the Current platform. The creator will get paid their usual license fees from the integrated platform (ex. Spotify or Youtube) in addition to getting a 20% allocation of the earned tokens from Current. As the platform further integrates decentralized storage, Creators can earn 100% of their revenue when paid in tokens.

With these mechanisms, users can better support their favorite creators by consuming on Current and helping them earn more for their work.

Tokens Spent on Current

Tokens can be used as a cash substitute within the Current app for digital and physical goods.

Premium Services

Users can use tokens to pay for premium services on Current. Such services may include offline listening, Ad-free streaming, exclusive uploaded content, and memberships to premium networks with which Current integrates.

Donations and Payments

Tokens can be sent to other users within the platform. As our platform expands users will also be able to use tokens to buy tickets, physical goods, and other services.

Advertisers

Tokens will be the primary currency within Current. Advertisers seeking direct relationships with Current will need to acquire tokens in order to promote campaigns within the Current network.

Future Applications

As the platform grows it's reasonable to say tens of millions if not more users will be holders of CRNC and its subtokens. The Current Network will provide support to enable other applications to use tokens for goods outside of the Current platform.



Key Takeaways

Tokens are split amongst participants to seed the platform with a useful cryptocurrency that initially serves to reduce subscription costs for consumers and ultimately to support creators who upload their content to Current.

Economics and Network Dynamics

The Current token economy is based on the number of users playing media in the Current network and their contributions to the network. The network has several stabilization tactics that help balance token outflows and inflows within the network.

Token Stability and Value Creation

Economics teaches us that value is subjective. Economic value for an item is created because people desire that item for one reason or another.

As Bitcoin came into existence in 2009 and adoption spread, the value of the virtual currency skyrocketed. In 2016, Dutch economists Von Oordt and Bolt published a model to analyze virtual currency exchange rates and what factors led to value creation. They found that three components are important:

- **1.** The existing use of virtual currency to make payments
- **2.** Forward-looking investors buying the virtual currency; effectively regulating its supply
- **3.** The factors that together will drive future consumer adoption and merchant acceptance of virtual currency.¹³

The basis of their theory came from economist Irving Fisher's observation from 1911,¹⁴ that speculators may effectively limit the money supply by withdrawing money from circulation in anticipation of higher future utility.

Limited issuance currencies such as Current's digital tokens and Bitcoin fall into this category. When initially pricing the token sale and creating the foundational layer behind the network's ecosystem, these factors were taken into consideration.

Token Pool Dynamics

- Limit the total supply of tokens to 1,000,000,000 (1 Billion) tokens
- To eliminate the need for issuance of future tokens, we'll create a user growth pool by taking a percentage of each token earned. The growth pool tokens gets put back into the miners reward pool after each block cycle

Reward users for their contribution

• while accounting for difficulty via contribution coefficient and block cycle variable as platform grows

Introduce a decay rate for long-time

• inactive users

Create a baseline market rate for the

 tokens via token sale and reward ecosystem

Token Redemption & Liquidity

- Allow tokens to be traded in for premium services and goods
- Ensure tokens will only be mined post token sale or purchased by advertisers
- Implement future use cases for the Current token that promote further liquidity (method for advertisers to buy direct ads, future outside application use)

Growth and Network Effects

- Entry point into cryptocurrency for mass market by rewarding a daily habit: media consumption
- Reward all participants of the media consumption cycle (consumer, curator, creator)
- Incentivize growth and improvements of the platform via contributions of the community (consumption, time, attention, referrals, user data integrations)

User Growth Pool and Decay Rates

The Current Growth Pool is always awarded 2% of every token mined within the system. This will ensure that the token reward pool never goes to zero and make future token releases unnecessary. In addition to this built-in distribution mechanism, the Growth Pool also receives token inflows from inactive accounts.

A 10% monthly decay rate begins after 6 months of neglect, at which point tokens are directed back into the Current Growth Pool via the smart contract. This continues until the use of the Current Media Platform resumes (a valid 30 second play or more). Users will be notified of this when they join and repeatedly before the 6 month mark. Similarly, a 10% monthly decay rate will be imposed for creators who do not claim their escrow tokens within 12 months of being awarded them. This is done to ensure tokens are not lost within the platform by users who abandon. If a user decides to store his tokens on a third party or offline wallet no decay rate will be imposed.



A Dynamic Subscription Model

The Current token creates a dynamic subscription model for streaming: one which, by allowing users the choice of toggling ads and subscribing to premium services, efficiently captures consumers' willingness to pay for premium serv-ices against viewing ads.

Evidence from the financials of two streaming services, Spotify and Pandora, show that consumers brings 30% - 40% higher revenue on a subscription over an advertising model (see Appendix #1 for a comparative analysis). Yet the subscription segment across almost all services is smaller than that for free-tier users.

In addition, the standard binary "advertising or subscription" model does not efficiently capture different consumer demand elasticities: especially those who value an ad-free experience, but do not necessarily consume enough to warrant a full-priced subscription.

Automatic Wallet Creation

Scaling the user base is a key factor in the valuation of the token. As such, Current will allocate a minimum of 10,000,000 (10 Million) tokens for distribution to early users for simply claiming their wallet within the Current platform. The amount will be relative to the cost of acquiring those users through traditional channels and will not be designed for wealth creation. This incentivizes early participation in the network from people outside of the cryptocurrency field of interest.

Users may invite their friends in which case they will earn more tokens for contributing new users to the network. Our mission is to make sure everyone can participate and get tokens early, even if they have never purchased virtual currency before.

Revenue Model

We envision five main ways of creating value and a sustainable ecosystem for CRNC:

- **1.** Users trading their tokens in for premium subscriptions and services
- **2.** Ad impressions before and after the ad-threshold is reached
- **3.** Third-party service fees for access to Current identity profiles
- **4.** Brokering the sale of tokens to Advertisers from token holders (Consumers, Creators, Curators) within an internal marketplace
- **5.** Earning a 20% token share from media played in any of Current's curated channels

Governance and Transparency

Today, the biggest issue facing blockchain companies doing token sales is the lack of transparency to the public. It puts all blockchain based projects at risk, thus Current will be implementing a core initiative we share with many amazing companies "Default To Transparency," ¹⁶ where our community is provided with the information they deserve.

Starting in Q4 of 2018, we will send quarterly reports to all backers because we believe token sales should operate in a transparent manner. A lack of transparency can create a lack of trust. In addition, we felt it would be imperative to add additional governance mechanisms into the Current ecosystem that facilitates the growth of the platform alongside community supported development and greater good objectives.

From the onset, Current will reserve 3% of the token pool for the creation of the Current Foundation. In the beginning, Current will serve on the Foundation's board of advisors. Over time, we will move towards the inclusion of key community members to aid in the oversight of the Current Foundation's goals of long-term network governance, long-term support of token holder interests, transition to an open-sourced and decentralized platform, partner programs, greater good programs, and academic grants that include investments in technologies that benefit the ecosystem. As part of this process, Current will open source the protocols and several components of the media platform to the general public. This allows our community of developers to build and expand the network and, ultimately, the holders of Current tokens. This transition is a statement of our dedication to our community and encouraging an environment where all participants benefit from its success.

Key Takeaways

The Current economy has been designed to combat fraud and reward contributions but ultimately requires certain mitigation tactics to remove bad actors from the community.

Market Landscape

Most of the blockchain-enabled media companies are focused on areas such as copyright attribution and decentralized distribution. Only a few of them are focused on incentivizing social media and advertising. Our analysis of the market landscape located several media-related tokens and revealed trends that have influenced our commitment and vision.

Incentivized Social Media & Advertising Landscape

This market segment ecompasses a cross section of incumbents pairing a daily habit with a simplified user experience that aims to remove the common barriers and technical complexities associated with the mainstream adoption of existing blockchain enabled products.

Kin, By Kik Interactive

Kik's successful experiment using a nonblockchain digital currency within their messaging platform validated that a decentralized currency could also take hold. After its implementation, the monthly transaction volume hit nearly three times the global transaction volume of Bitcoin,¹⁷ their users proved their ability to quickly adopt and use the currency.

The Kin token will be used to reward users for their contributions to the ecosystem. As an established platform with millions of users, Kik will benefit from fast and broad adoption of Kin. Kin, much like Current's token, will be used to reward creators, access premium content, and pay for goods and services within the ecosystem. While in a different market segment from Current, Kik has proven that a the 13-24 year old demographic has a strong willingness to adopt a digital currency with low barriers to entry.

Basic Attention Token (BAT) / Brave Internet Browser

Brendan Eich, the founder of Javascript and co-creator of Mozilla, created the Basic Attention Token (BAT) to facilitate value exchange in the Brave Internet Browser's digital advertising marketplace. Brave is an open-sourced, privacyfocused internet browser that blocks malvertising and ad-trackers while accurately rewarding publishers and advertisers through smart contracts on the blockchain.¹⁸ While capitalizing on the security and privacy conscious desktop internet user, they've also grown a modest user base of blockchain early adopters from the momentum of their successful ICO which raised \$35M. Similar in the way that BAT commoditizes and rewards for "user attention" using web and publisher content, Current is directly applying to multimedia consumption.

Steem

Steem is an incentivized social media platform, which is similar to Reddit and uses the its own blockchain and proprietary tokens to reward and moderate discussion.¹⁹ Their platform has seen considerable growth within their core demographic of cryptocurrency enthusiasts and early adopters from the proliferation of interest in digital currencies and blockchain technology. Steem's community reward system is similar to Current's; however, their reward system requires input from users - reading content, voting, and commenting. Current's users earn tokens merely from their consumption patterns within the platform.

Decentralized Media Platforms

Blockchain technology is poised to be as disruptive to the Media Industry as digital recordings and the internet have been. Decentralized computing, and the distribution models enabled by it, level the playing field so newcomers and established creators can both thrive. Broader audiences and more transparent payments top the list of benefits to creators and consumers. However, new decentralized platforms, like Ujo, Opus, JAAK and SingularDTV face issues like industry lobbying, adoption rates, prior cryptocurrency holdings, limited content libraries and technical hurdles. Current is not impeded by rights attribution, a limited population of cryptocurrency holders, or a limited content library. There's never a shortage of cryptocurrency holders on the Current platform because all users immediately earn CRNC by streaming media. The content library and rights attribution issues are handled by our external media partners.

Key Takeaways

User attention is being commoditized across several mediums including messaging, web browsing, and media production. Platforms, like Kik, have validated the adoption of a digital currency within the 13-24 year old market; Current aims to penetrate that market from a media streaming standpoint.

Advantages in Media Landscape

While there are certainly other companies within the media and social landscape looking to capitalize on blockchain technology, Current encompasses a much broader spectrum of content offerings using our hybrid approach than any one company in the same market can offer.



*Prelaunched Decentralized Blockchain Media Company

Token Launch

The primary purpose of the token launch is to effectively kickstart the token market and support Current Media in further developing technology that contributes to the market. Bonuses will be provided to early investors with a short lockout period after the sale to bolster stability.

Symbol	CRNC	Sale Amount	350,000,000 CRNC
Role	A utility token used to purchase goods, premium services, and ad inventory within the Current platfrom	Exchange Rate	est. \$0.24 <> 1 CRNC
Total Supply	1,000,000,000 CRNC	Minimum Transaction	0.03 ETH
Accepted Payments	ETH, BTC, NEO	Soft Cap	\$5,000,000
		Hard Cap	\$36,000,000
Public Presale Period	February 7, 2018 (12:00AM CT) - February 21, 2018 (11:59PM CT)	Token Contract Address	To Be Announced
Main Sale Period	March 14, 2018 (12:00AM CT) - April 4, 2018	Smart contracts will distribute tokens within one month of the token sale.	
Claim Your Wallet	(11:59PM CT) March 21, 2018 (12:00AM CT)	Token giveaways will be used as a marketing and growth tactic. "Claim Your Wallet" will launch March 21st, 2018 to transition our existing user base into the blockchain ecosystem and create awareness.	
Campaign		Any unsold tokens will be locked in escrow for two (2) years and then returned to the token supply.	

Funding Goals

As with any crowdsale, it's difficult to forecast the total amount that will be raised. Current has created several funding scenarios that outline how resources will be allocated. The amount of capital raised during the token sale dictates the level of impact we have on the cryptocurrency and media industries.

\$5M

Blockchain attribution protocol implementation within Current platform. Launch incentive structure and v2.1 of the Current platform.

Integrate other music and audio services within Current, enable legal offline content consumption technology from the most popular thirdparty streaming services such as HBO, Netflix, Youtube etc.

\$7.5M

Launch Android App. Partner with external media networks to introduce platform tokens to their user base and host platforms.

\$10M

Partner with external media networks to introduce CRNC to their user base and platforms. Launch web and desktop apps.

\$12.5M

Expand audiobooks, podcast, and video library. Launch premium service bundling plans. Customize all aspects of the ecosystem in local languages.

\$15M

Expand integrations with TV & Film networks across the world. Expand our content catalog of worldwide music and audio services.

\$17.5M

Launch TV OS Apps, Live TV channel integrations, launch the advanced version of the recommendation algorithm. Expand Asian market offerings.

\$20M

Launch decentralized distribution protocol within the Current ecosystem. further expand worldwide content offerings and integrations.

Over \$20M

Strategically acquire smaller players in the music and video space to rapidly increase user base and holders of Current tokens. Expand our own content library with direct partnerships with media studios and license holders, incentivize creators to create custom content for direct upload to the platform, further expand worldwide content offerings and integrations, expand direct selling efforts to physical goods and services via tokens.

Comparibles in Media Platform Funding

This list of media companies and their total funding amounts illustrate the amount of capital required to build the early stages of a superior media platform.

Spotify \$1.56B		
Hulu	\$683M	
Soundcloud	\$362.82M	
Deezer	\$217.47M	
Saavn	\$110M	
TuneIn	\$103.12M	
Slacker Radio	\$70.66M	
Scribd	\$47.76M	
Pluto TV	\$43.5M	
Vudu	\$36M	
TubiTV	\$30M	
Stitcher	\$18M	



Key Takeaways

Significant capital investment is required to build and scale media companies.

Total Token Supply Allocation

Our fixed token supply, of 1 Billion tokens will be allocated in the following ways

35% Mining Rewards

For providing growth to the platform, algorithm advancement, data to the platform, consumption, distribution, maintaining and growing the platform, and more

35% Token Sale

For funding research, engineering, platform development, marketing, business development, partnerships, support, admin costs and more

17% Team & Advisors

For early team members, future team members, early contributors and individuals advising the Current team in media, growth, blockchain technology, and fundraising

10% Community Growth & Strategic Partners

To support community growth programs such as the "Claim Your Wallet" campaign and strategic partners who have and will continue to shape and grow the ecosystem

3% Current Foundation

For long-term network governance, transition to a fully open-sourced and decentralized platform, partner support, and academic grants

Use of Funds From Token Sale

Distribution of funds received from the sale of 35% of our total token supply

40% Development & Research

Development costs are dedicated to full-time salaries, contractors, research, platform and hosting fees

30% Marketing & Platform Development

Building a robust marketing campaign in several languages, user acquisition, building up brand awareness

25% Operations, Business, & Corporate Development

Growing business via strategic partnerships, additional content integration partners, acquiring or partnering with well known platforms relevant to growing the CRNC token holders

5% Legal & Administrative

Legal, accounting, hardware, rent and other third-party services needed to run an organization

PHASE 1

PHASE

Protocol Platform **Operations** APR 2016 APR 2016 **Finalize Seed Round Commence Project** MAR 2017 O3 2017 Launch v1 Current Platform JUN 2017 **Protocol Feasibility Analysis CRNC Whitepaper JUL-DEC 2017** AUG 2017 **Token Sale Preparation Add Radio Integration** Q1 2018 SEP 2017 **Initial Protocol Development Platform Stability**, **Offline Capability DEC 2017** Current v1.2 Update, **JAN 2018 New Discover & Library UI Token Sale Announced to Media, Marketing Campaigns, and Bounty Program** FEB 7 - FEB 21, 2018 **Public Presale** MAR 14 - APR 4. 2018 Main Sale Launch. **Claim Current Wallet Campaign CRNC Wallet Generation** Allow anyone to participate APR 4. 2018 **Token Sale Concludes** Q2 2018 Current v1.3 Update, **Performance & Scalability** O2 2018 **APR / MAY 2018 Distribute CRNC Tokens From** Video Integrations: Netflix, Hulu, **Record Offline Video** Token Sale **O3 2018** 03 2018 v1 Launch Blockchain Attribution Launch Android Platform Reward users for consumption O4 2018 **Expand Operating Systems**, Launch iPad, Smart TV based platform O1 2019 Q1 2019 v1.2 Blockchain Attribution **Decentralized Content Distribution** Allow any network to access and Creators earn 100% of revenues integrate our protocol

Roadmap

Q4 2019 Current Ad Platform

Privacy and Security

User Data Collection and Anonymity

We realize that some users may be skeptical of our usage of the data collected based on past experiences with other software organizations. Like many market leaders, Current puts the user at the helm and gives control with opt-in, opt-out features.

Users can choose whether or not to contribute to the algorithm and earn token rewards at a faster rate. Users decide what to share with the network and adjust their privacy settings accordingly, with most personally identifiable pieces of information decoupled from preference data. Current is dedicated to the security and privacy of our community members and will be keeping all private data on the user's device.

The Current ledger system intends to explore the implementation of the ANONIZE²⁰ algorithm amongst other measures to further protect user privacy. Current will continue to make this a top priority as the platform evolves.

CRNC Wallet

Current will use the Ethereum MultiSig wallet as our standard. CRNC will be fully compliant with ERC20 standards in order to ensure that the tokens are compatible with all Ethereumbased wallets (Mist, Geth, Metamask). In the Current Media Platform, users have read-only access to the amount of tokens they've earned from their contributions. Within the platform, users will be supplied with an encrypted key that changes every 20 seconds. Users will then use this as one of their signatures as part of a two-factor authentication apart of the CRNC wallet that will be stored separately from the app itself. The wallet is being designed with anonymity and security in mind.

While the user experience will be seamless, this encryption adds another layer of additional security, however, no matter how secure an online wallet or exchange is, possible security vulnerabilities inherently exist, e.g., human error. With the growth of Altcoins and token sales, we noticed very few options exist to store these coins offline. Current is exploring the possibility of providing the offline hardware needed for token holders who meet a predefined threshold for safer keeping.

Advisors and Investors



Mark Cuban Owner, Dallas Mavericks, Chairman, 2929 Entertainment

Investor, Innovator and Philanthropist. Early in his career he sold his computer consultancy, MicroSolutions, to CompuServe. As pioneer of digital media broadcast, he later launched and sold Broadcast.net to Yahoo. Beyond that, 2929 Entertainment owns and manages AXS TV (previously HDNet). Current owner of Dallas Mavericks.



John Wise Founder, CEO Loci, Inc.

Redefining the world of innovation by developing a platform technology which maps the landscape of innovation. John has extensive technical and engineering management experience with a proven track record of successfully creating, developing, and implementing new products and services, managing organizational and product growth, and creating process improvements.



Daniel Hoffer Founder, Couchsurfing, mr. Partner, Tandem Capita

Investor, advisor, and strategic general management expert with a passion for both consumer and SAAS, especially in the areas of online travel, marketplaces, and sharing economy, among others. Professional experience as a VC, Fortune 500 product executive, and found-er/CEO.



Galia Benartzi

Co-founder & Business Development, Bancor Foundation

As a technology entrepreneur, she has been building software startups since 2005. She has been through multiple acquisitions, wind downs, venture capital financing and everything in between. She Co-founded Bancor, one of the top 5 ICO's of 2017. Studied at Dartmouth College and Johns Hopkins University.

Danny Johnson

A champion for charities and those in

need of assistance, often donating his

time and energy to charitable efforts

which is rooted in the vision of Pinkcoin.

MBA from Hawaii Pacific University.



Eyal Hertzog Chief Architect and Head of Product Development, Bancor Foundation

A venture-backed technology entrepreneur for over 20 years. Founder of MetaCafe, Israel's fastest growing video sharing site reaching over 50m uniques before being acquired. Previously, Eyal founded Contact Networks, one of the first social networks in 1999. Eyal has been an outspoken thought leader on cryptocurrency in Israel.



Eric Gravengaard Founder, Athena BitCoin, Founder, BitQuick Exchange

Co-founder of several digital cur-rency businesses including Red Leaf Advisors. Helps small businesses, individuals, and institutional investors purchase and secure digital assets; Manages client assets across multiple hedge fund strategies; guides token issuers through the process of launching their own digital tokens (ICO, TGE, etc.).



Dave Hoover Co-founder, Dev Bootcamp, Engineer, Augur, ConsenSys, Raise

With a background in Psychology, Dave's been an engineer ever since he became interested in how technologists become competent and keep up with the constant change in the ecosystems. Minority owner of 3 acquired companies. Supports his 14 portfolio companies.



Tony Simonovsky ICO focused Growth Hacker, KICKICO

Serial entrepreneur. Back in 2005 he started his first business, providing SEO services to clients in Moscow region. In 2012, he began applying data science to online mar-keting. In the course of next 3 years he became a well-known expert in the area and is now helping companies worldwide become data-driven, still living a life of a digital nomad.



Gregg Latterman Founder, Aware Records;

Gregg has spent over 20 years in the music and entertainment industry. Founder of Aware Records and A-Squared Mgmt; signed Train, John Mayer, Five for Fighting and Mat Kearney, The Fray, Michelle Branch, Liz Phair, Brandi Carlile, Jack's Mannequin, etc. These artists have sold over 30 millions CD's, in addition to billions of streams of their individual songs.



Jim Gray Founder, OptionsXpress

Jim serves as the Special Advisor of Merrick Ventures, LLC and has more than 25 years of experience in the financial markets. Serves as Special Advisor of Merrick Ventures, LLC. Previously, the public company he founded and acted as Chairman of, OptionsXpress, was acquired by Charles Schwab in 2012. Member of the Chicagoland Entrepreneurial Center.

Core Team and Contributors

With four years of experience building consumer and media products, we have generated tens of millions of app downloads & tens of millions in revenue. Our most recent exit was ranked amongst Alexa's Global Top 500 most trafficked websites.



Dan Novaes Co-founder, CEC

Dan has been profiled in Forbes, Entrepreneur, & Bloomberg TV for his entrepreneurial achievements and amassed a following of 1,200,000. He's had two prior exits from companies generating tens of millions in revenue. Dan has been investing in the blockchain space since 2013.



Kiran Panesar Co-founder, CTO

Kiran has built and overseen sites that provide secure, scalable web services for tens of thousands of concurrent users, handling over 1 billion requests per month. He's passionate about bringing the same scalability to decentralized technology.



Nick McEvily Co-founder, CPO

With extensive experience leading software and design teams for the last eight years, Nick oversees the product design and development at Current. He has spoken on blockchain tech-nologies and is an avid Ethereum and Bitcoin investor.



Josh Moyer Business & Marketing Mgr

Experienced across business development, UI/UX, research, paid marketing, growth and data analytics. Leveraging his unique skill set, he's driven hundreds of thousands of downloads from the 13-24yr old demographic and facilitated partnerships with major influencers.



Seamus Doheny Curation Director Partner, Manifest Chicago

Seamus has years of experience in the media space as a music video producer for Towkio and an alumni of Atlantic Records & OWSLA. At Current he oversees artist partnerships, creates original content, and maintains the highest curatorial standard.



Steven Lee Engineer

Steven is Lead iOS developer at Current. He has performed research in using machine learning combined with predictive algorithms to analyze financial data. Using his past knowledge will be aiding in algorithm for providing recommendations through Current.



Evgeny Yurtaev CEO, Zerion.io

A FinTech entrepreneur, passionate about combining theory with practice to achieve outstanding results and always straying from my comfort zone so as to never stop evolving and learning. Zerion.io is developing smart contracts for blockchain platforms.



Alexey Bashlykov Co-founder and CTO, Zerion.io Blockchain Engineer

Zerion believes in a decentralized future. We help innovative companies to create blockchain-based products that disrupt and disintermediate and we empower the individual investor. A dedicated, experienced, technologist with the knowledge, network, and integrity to help companies go from an idea to success.



William Ryan Behavioral Economist,

Conducting research in Cognitive Neuroscience and Behavioral Econ. Previously, a Senior Associate at TGG Group, an innovative consulting firm founded by a handful of the world's leading economists and psychologists including Nobel Prize winner Daniel Kahneman, Freakonomics author Steven Levitt, and former Citigroup CEO, Vikram Pandit.



Brian Ng Economics & Mathematics, University of Chicago

Data scientist and former economics consultant at TGG, where he worked with leading economists including Nobel Prize winner Daniel Kahneman, and Freakonomics author Steven Levitt.



Steven Myers Dir. of Sec. Pgms, Assoc. Prof. of C.S. & Informatics, Indiana University

Expert in cryptography Complexity Theory, Probabilistic Combinatorics, Randomized Algorithms, Security, and Systems Security. Co-author of "AN-ONIZE: A Large-Scale Anony-mous Survey System", and "GPU and CPU parallelization of honest-but-curious secure two-party computation."



Amy Karr Co-Founder, Arclydia, Forbes 30 under 30 recipient

Crafted media messaging, strategic content and data-driven creative narratives for the last 8 years. Former VP Content and Strategy Directory at Starcom, Head of Strategic Partnerships for Hillary for America, and award winning marketing strategist.





Jill Richmond SVP, SparkPR, SparkChain

Advisor, consultant and thought-leader on emerging technologies coming to market, among them blockchain, artificial intelligence and digital platforms. Jill has over 15 years of experience focused on startups including co-founding two, advising several, helping talented CEO's bring products to market.



Trey Ditto Founder & CEO Ditto PR

Formerly with AP in Dallas, handled

communications for U.S. Congressman,

Governor, & U.S. Secretary of Ed.

Currently in NYC working with top PR

firms, developing a loyal following of

tech, policy, education, entertainment

and finance clients.

E

Ed Zitron CEO & Founder, EZPR; Top 50 People in Tech PR 3x

Author of 2 books, award winning PR strategist and founder of EZPR. Published by Forbes, The Wall Street Journal, Eurogamer, PC Gamer and PC Zone

Frequently Asked Questions

Why does Current need to use the blockchain to accomplish its goals?

Current will utilize the benefits of a blockchain across two phases, first, enabling Current to record user contributions to the platform and reward them for their time, attention, and consumption. This will continually evolve towards using the blockchain to aid in the decentralization and transparent distribution of content, payments, goods and services.

Why did Current choose Ethereum over another blockchain?

The Ethereum network was chosen because it is one of the most robust blockchain platform built for application integration along with the largest development comm-unity behind it. The Ethereum foundation's dedication to continually develop and improve the underlying technology to improve scaling issues make Ethereum one of the most compelling blockchain platforms to build on top of. Our team has closely been monitoring the progress of Raiden and how we can use state channels to solve the scalability issues we would be facing within Current.

Is the Current platform reliant solely on third party API integrations?

Current launched stage one of platform at the end of March 2017 with a mix of eight public and private inte-grations, a good portion of which we've secured through direct partnerships. All our integrated partners are ben-efited as they retain all the user interactions, data, and revenue from plays within Current, ie. a play on Spotify still counts for a play on Spotify and they get paid on that stream. Also, with the average session duration in the Current app being an average of 18 minutes and continually increasing, these integrations can expect to see longer time spent on their respective networks and a better experience for their users.

Our mission is not to cannibalize our partner networks, in fact we want our users to use tokens for premium subscriptions within these networks. This further benefits these networks and the broad industry as a whole, turning free users into paying users. It is important to note, that our goal is to continue to add content integrations as time goes on, further decreasing the impact of any one integration dropping from the Current platform.

During final phase of the platform, the Current platform will have reached the critical mass of users it needs to make full use of our de-centralized media integration that would co-exist alongside the most popular third party networks.



How does Current's protocol account for new integrations into the platform?

When new integrations are added, especially of a new media type (like film for instance), the available pool of relevant information grows and therefore increases the breadth of our recommendations. We can catalogue and display more content and therefore keep users engaged longer. This will in turn impact the contribution coefficient associated with each user and the network as whole.

How are CRNC tokens leaving Current's platform?

Tokens purchased through the token sale or earned from their participation in the platform through media consumption will be able to openly trade their CRNC on participating exchanges.

What is the total supply of CRNC? Will Current ever issue more?

The total supply of CRNC will be limited at 1 billion tokens, and we will never issue new tokens after the token sale. During the token sale, 35% of all of the tokens will be available for purchase, and the remainder will be earned through a user's contribution by consuming media. The rate at which the user is able to earn these tokens is dependent on a variety of factors outlined in the Token Dynamics and Protocol section. The CRNC tokens won't leave a user's wallet on the ecosystem until they've been sent to a wallet on a partici-pating secondary exchange, or are placed in a participating or proprietary offline wallet.

In the future, beyond phase 2, tokens will be able to be spent directly on other platforms for premium services, content and other goods. That said, once the Current Ad Platform goes live, these external services can use their accumulated CRNC on targeting display advertising within the Current Platform.

How are CRNC tokens redeemed in the platform?

Users are able to redeem their CRNC for premium subscriptions to our media partners, such as Spotify. The user would select which service they would like to redeem their CRNC for and we would provide a key to upgrade their service on that network.

How do you remove any chances of users gaming or abusing the system to continually earn tokens?

To remove potential fraud from "bad actors" the 8 variables outlined on page 10 of the Token Dynamics and Protocol section that make up our contribution coefficient are designed in a way to automatically detect and adjust the rate at which the participant is earning CRNC tokens. Should a "bad actor" be automatically detected, their contribution coefficient will go to zero, effectively earning the participant zero CRNC tokens.

How many CRNC will be issued during the Token Sale?

350,000,000 CRNC tokens or 35% of the total supply of tokens (1,000,000,000) will be available during the crowdsale.

What is the minimum cap goal for the Token Sale?

\$5,000,000 USD

What is the hard cap for the Token Sale?

\$36,000,000

Who can participate in the Token Sale?

We want everyone to be able to participate in our Token Sale and there are two ways to participate.

- You can either obtain CRNC tokens by trading in other forms of cryptocurrency as part of the Token Sale (Public Presale, and Main Sale). Participants from the U.S.A. must be accredited to buy CRNC.
- 2. Alternatively, anyone can take part of the "Claim Your Wallet" campaign without spending anything. Users who claim their wallet will be given a predetermined amount of CRNC Tokens, distributed upon the launch of the CRNC attribution protocol.

What's the minimum to participate in the Token Sale?

0.03 ETH

Is there a distribution schedule on the tokens purchased during the presale?

In some cases, depending how big of a bonus on CRNC tokens you desire.

In order to be eligible for large discounts on tokens purchased during the token sale you will be subject to a distribution period where you will be given tokens on a pro-rata basis depending on your selected distribution period.

What happens if we don't meet our minimum cap goal?

All transactions will be refunded to the wallet address used in the transaction.

How do I set up my wallet on Current?

Once the CRNC wallets go live, interested parties will be directed to a portal where you will be asked to claim and generate your wallet. Once the wallet has been generated, you will be provided with a seed phrase tied to that specific wallet address. This is something you'll keep for your records. Once that seed has been generated, you'll be asked to enter a password. After this process has been completed, we will reward that address with a predetermined amount of CRNC tokens for doing so.

With your new wallet generated, you'll be able to make referrals to your friends to earn additional tokens.

Why is there a decay rate on CRNC tokens held in my wallet?

In order to incentivize active users on the platform, any CRNC tokens held in an account that goes inactive for more than 6 months will begin to decay; the decaying tokens will then be transferred back into the growth pool to reward active participants.

A user will get a series of alerts before this takes place. The decay rate does not apply to any tokens purchased during the token sale, or tokens transferred out and held in an offline wallet.

The rates of decay at associate intervals are as follows:

• 6 months @ 10% month-over-month

Where can I learn more about Current and CRNC?

Current Platform Website http://current.us/

CRNC Token Sale Website https://tokensale.current.us/

Telegram http://bit.ly/2xWBPfH

Facebook

https://www.facebook.com/ CurrentCRNC

Twitter

https://twitter.com/ Current_CRNC

Medium

https://medium.com/ current-crnc

Appendix 1: Comparative Analysis and Token Dynamics

Spotify

As Spotify isn't publicly traded, we rely here on news reports of Spotify's financials²¹ reported to its Luxembourg parent.

Spotify ended 2016 with 126 million monthly active users, with 78 million (62%) free-tier users and 48 million (38%) paid subscriptions. However, 89.9% of its revenue, 2.64bn Eur., is driven by paid subscriptions. Due to cost of revenues, the gross profit on premium subscriptions was €483.8m, while Spotify's ad-supported business recorded a gross loss of €33.3m.

We assume that cost of revenue is driven by streaming royalties to record labels, PROs, back-office services, and publishers, approximated on a per-play basis. We use a EUR-USD conversion rate of 1:1.2.

Total Cost of Revenue

Premium: 2,640 - 483.8 = €2,156m Free: 295 - (-33.3) = €328.3m

Estimated Cost of Revenue per User per Year:

Premium: 2156/48 = € 44.9 * 1.2 = \$54 Free: = 328.3/78 = €4.2 * 1.2 = \$5 We assume the average play generates \$0.006 in royalties (industry eCPM):

Number of plays per average user per year: Premium: 54/0.006 = 9000

Free: 5/0.006 = 840

Assuming that consumer valuations for Spotify Premium are solely driven by the avoidance of ads (aside from other benefits, for instance mobile app usage or higher audio quality):

Number of plays per average user per year:

Premium: 2640 * 1.2 / (48* 9000) = \$0.007333 Free: 295 * 1.2 / (78* 840) = \$0.005403

Thus we estimate that Spotify Premium users overvalue each stream around 35% as compared to free tier users

Pandora

Pandora, in contrast with streaming music providers like Spotify and Current, acts as an internet radio provider -- which means its royalty and distribution model is somewhat different, and we track listener time, rather than number of legitimate plays. These figures are quoted from its financial statements: the 2016 10-K and 2016 Q3 10-Q.²²

Like Spotify, there are more Pandora subscribers than there are free-tier. There were 74.5M free-tier users, and 4.39M subscribers in 2016. Its subscription-based service logged 2.79B total listener hours, as compared to 19.17B on the free advertising tier.

We use the RPM metric (revenue per thousand listening-hours) provided on the Pandora 10-K (only the first nine months are included, because the RPM metric is abandoned after Q3 2016):

Advertising based RPM

14.53B listening hours = \$58.10

Subscription based RPM

2.04B listening hours = \$80.98

By comparison - 80.98/58.10 - we arrive at an estimate of roughly a 39.4% increase in revenue per listening hour with the subscription viz. An advertising model. Keep in mind that Current's RPM is slightly different than Pandora's RPM in the sense that we have an enforced 30-sec minimum per track when counting listener time.

Behavioral Dynamics

Why do users pay more for subscriptions to get rid of ads?

- 1. Mental accounting. Individuals often assign expenditures to specific accounts, and constrain their spending differently across accounts in ways that often violate the economic principle of fungibility.²³ Instead of viewing ads, which is a constantly salient expenditure of "attention," users may file streaming subscription renewal fees under a "utilities" bucket, a decision frame in which expenditure "matters less."
- 2. Salience. Advertising is a continuous demand on attention, whereas a monthly fee is a less salient, one-off expenditure.

Why are there always more free-tier users than subscribers?

- Consumers view free prices more highly irrespective of cost-benefit difference.²⁴ By being free to use, Current leverages the "free" effect to make everyone subscribers.
- 2. Frictions for payment, like credit card validation and service fees, exist for currency transactions. Using CRNC tokens removes the frictions of small payments.

Token Dynamics Visualization

We calculate a rough projection for hours of play each day on the Current network by approximating an exponential growth rate, using figures from internal projections. We start with a rough projection for total hours of play by all users each day at 180 hours, high exponential growth in the first two months, and 25% per month for the first year. The block reward decreases over time linearly as more tokens are mined. We estimate the change of block reward using the block reward equation, and assuming that the growth pool stays at 4% of mined tokens.

As total blocks mined increases exponentially over time, block reward per hour of streaming decreases exponentially:



Afterwards, we estimate the token reward per listener hour. Using our Spotify average play revenue estimates from page 38 (an eCPM of \$0.006/legitimate play), and minute length (3 minutes) and average contribution coefficient (0.5), we estimate the average token reward per hour the average listener listens.



We use our Spotify estimate of revenue per hour of legitimate plays (\$0.12) divided by average token award (0.25) to arrive at a starting price estimate of \$0.48 per token. As one token roughly represents how much economic value one hour of listening brings, so we estimate the price of a token given that it equals the revenue brought by its equivalent in Spotify listener time:



Given that the average price of a Spotify subscription is \$5.78,²⁵ we estimate that the number of legitimate listening hours for a consumer to earn back a subscription is 43.7 hours.

Appendix 2: Decentralized Media

It is cost prohibitive to store large amounts of data on the Ethereum blockchain. The InterPlanetary File System (IPFS) makes it possible to do so while maintaining a decentralized network. IPFS is a peer-to-peer distributed file system that connects all computing devices with the same system of files. The files are addressed by the hash of their content as opposed to a centrallycontrolled location. The diagram below shows how nodes access data with IPFS vs the de facto HTTP protocol.

IPFS will serve as the data storage layer of the Current platform. Current will offer users CRNC as an incentive to provide storage of uploaded files on the network powered by IPFS. If needed, Current may implement additional storage measures via services like Filecoin²⁶ or IPFSstore²⁷ where a negligible tariff per media item sold would be imposed on the creator and paid to whomever is hosting the content for the network on the aforementioned services.

In order for the system to operate, Current must also implement a logic layer, done via Ethereum smart contracts. The contracts provide creators with the appropriate payments for their content in a fair and transparent way. To control access to IPFS-hosted content, we employ an asymmetric encryption mechanism. All files uploaded to the Current IPFS network are first encrypted by the Current Foundation's public key. This can be performed in the iOS application, and avoids any single point of failure. When a user wants to download a track, the IPFS address hash is sent to the Current API which will load the file from the IPFS network, decrypt it using the Current Foundation's private key. The track will then be reencrypted using the user's public key, and then provided to the user.

This final step presently requires interaction with our centralized API. While we have focused on building a stable, redundant system we recognize that this presents a possible single point of failure in the network. Before this phase of the platform is implemented (est. Q1, 2019), we expect to see advancements in the IPFS platform to allow for more finegrained access controls to be included in the filesystem. This would allow us to employ a fully-decentralized content distribution system.



Centralized vs. Decetralized Computing Model

A centralized architecture represents a multiple client to single server model where the server computer is the one where all of the major processing or storage is done. A decentralized architecture allows for processing to be distributed among multiple computeing nodes with no single server machine solely responsible for all the processing.

Uploading Content



Accessing Content



Endnotes

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