



circles

**Decentralized, Meritocratic Payment for Creators and Consumers by
Investment and Dividend Payouts**

Version 1.0

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Abstract

Circles aims to disrupt the ever-expanding job market of Online Content Creation by making a peer-to-peer ecosystem in which creators receive direct payment from supporters in the form of a *circulation*, which in turn pays the supporters with each consecutive circulation afterwards in the form of Circle token dividends paid out automatically by a smart contract.

Preface

With the birth of Web 2.0, coined by Darcy DiNucci at the turn of the millennium, websites that enable users to create content birthed an ecosystem conducive to true freedom of expression in a multitude of forms. A problem, however, exists in all platforms that provide monetary compensation to their content providers, those that give the platform value in the first place: an underlying reliance on advert services.

YouTube is the best, and largest, example of this flawed business model. A single channel with an average of five-thousand views per video, *assuming that at least 20% of those viewers watch an ad for greater than thirty seconds beforehand*, would average \$4 to \$10 in earnings. The total number of views, and money generated, can both passively go up over time as the video remains on the platform, but profit margins are low regardless. **Taxation** and YouTube's **45% cut**^[1] of a video's revenue, provided by Google AdSense, make earning money extremely difficult for growing creators, even if the videos have a reasonable or high level of quality.

In the first quarter of 2017, YouTube saw massive backlash from advertisers^[2] on its platform for ads appearing on hateful or otherwise aversive content. Commonly referred to as the "Adpocalypse", videos that advertisers deemed 'unsafe' for their brands were demonetized; in one specific instance, a prominent YouTuber Felix Kjellberg was targeted by *The Wall Street Journal*^[3] for making comments that, when taken out of context, were construed as anti-semitic and extremist. This led to a number of repercussions for Felix and his business ventures, and may have very well been the beginning of the ad boycott that reduced revenues on YouTube for small and large creators by demonetizing^[4] countless dozens of videos.

The unstable economic model that most YouTube creators currently face has been alleviated to some degree by the consumer-crowdfunding platform Patreon. However, the nature of Patreon closely mimics that of Kickstarter with one key difference being its monthly recurring donation charge. The incentive with Patreon is merely additional content and kudos from the creator to the consumer. While this may be a perfectly acceptable alternative at the moment to a crippling reliance on ad revenue, a Web 3.0 application can do better.

[1] <https://en.wikipedia.org/wiki/YouTube#Revenue>

[2] <https://www.inc.com/associated-press/youtube-ad-boycott-google-alphabet-biggest-headache.html>

[3] <https://www.wsj.com/articles/disney-severs-ties-with-youtube-star-pewdiepie-after-anti-semitic-posts-1487034533>

[4] <https://twitter.com/h3h3productions/status/847200160560140288>

Creating a System that Benefits Consumers

An Alternative to Ad Reliance

In the online creation market, at the end of the day each and every service depends on ad revenue from advertisement providers. The common most often used example for an entirely ad-based business model is YouTube, circa 2006-2015 before YouTube Red began in 2015. This accessible platform for creators led way for an entirely new job to dominate Web 2.0 with relative ease by the mid 2000s. But with it's platform gaining immense popularity, so too did it gain immense scrutiny from the public and the advertisement industry.

The income provided by Google's AdSense program, adopted by YouTube in April of 2006 shortly after it was purchased by Google for around \$2.2 billion, has always been unreliable. **CPM**, or 'cost per mille,' refers to the amount of money generated for a website per one-thousand impressions made by an advertisement on that website. For YouTubers, as calculated by SocialBlade,^[1] CPM for a video can range between \$0.25 and \$4.00. Many YouTubers with relatively large followings adopted this form of income as their primary source of sustainable livelihood, and with the ad boycott in Q1 2017, many saw their somewhat shaky revenues drop by 50% or more as large company advertisements were pulled and CPM dipped to all time lows, whereas other creators were demonetized and received no monetary compensation for their work at all. This led to an increasingly strong push towards voluntary, crowdfunded income.

Patreon and PayPal donations are the most common forms of voluntary crowdfunding for creators at the moment, with Patreon doubling its user base^[2] by mid May 2017, with projections that it will pay creators on its platform **\$150 million in 2017 alone**. That's up \$50 million from 3 years ago, and as ad-reliant platforms lose ground, Patreon and others like it will continue to grow. But what do patrons actually *get* from supporting a creator? The answer is simple: exclusive content, patron-only blog posts, early content access, and the list goes on. While this is great for hardened fans of a creator, it isn't that appealing to the broader audience of soft-support. For example, popular YouTube creator and alternative news figurehead Philip DeFranco has a subscriber base of around 5.4 million as of June 20th, 2017. With that many subscribers, his patreon only engages around **16,705 fans. That's less than 0.31% of his total subscriber base.**^[3] On the other hand, his most viewed video of all time (with likes publicly visible) has 6.05 million views and 264,000 likes. That's a better engagement rate, but it's still only **4.36%**.

With Circles, consumers can provide a small monetary investment in the creator's work while simultaneously advertising it, paying the creator, and getting paid for each successive circulate.

[1] <https://socialblade.com/youtube/youtube-money-calculator>

[2] <https://techcrunch.com/2017/05/18/patreon-pushes-as-youtube-stutters/>

[3] <https://www.patreon.com/DeFranco>

Circles

Creators Get Rewarded on Merit

With YouTube as a basis for examination and modeling, assume that the average creator brings in 20,000 views each video, posts one ten-minute long video a week, and has an average engagement rate of 5%. That would equate to 1,000 likes, and around 20 instances of CPM being fulfilled as there were 20 sets of 1,000 viewers. While these aren't bad statistics, keep in mind that in 2017, Adblock usage grew 30% globally and 11% of the total internet user base blocks advertisements.^[1] That cuts down the actual engagement that would provide monetary compensation to around 17,800 viewers, which is approximately 18 instances of CPM fulfillment. *And*, considering that videos with less viewership typically net lower CPM advertisements, the average 'cost per mille' would be somewhere near \$1.00 equivalent. That's only **\$36 per ten-minute video**, and with a weekly upload schedule of one video it would result in \$144 a month, \$1,872 a year **before taxes**. This simply isn't enough to live off of, by any metric. If you increase the production of videos to seven a week, assuming this is the creator's full-time career, that increases the pre-tax income to \$36 a day, totalling \$13,140 for a year -- again, before taxes. That's **less than working a minimum wage job in America full-time.**^[2]

Now, imagine that instead of views equating to revenue, the number of engagements you received became revenue. With the previous numbers, even if each engagement netted an overall contribution of \$0.05, you would make **\$14 more per video**, and the video would no longer be constrained to a ten-minute (or longer) format to increase the number of ads shown. The math is simple: the more viewers that like your content and want to support it with a flexible amount of money, the more you make. Better content = better engagement.

Incentivized Engagement for Circulators

In the previous instance, an engagement rate of 5% was assumed because of pre-existing data from a specific case. Real engagement rate is actually much lower, especially for channels without a base of hard-support. This is typically true for most smaller creators. To make content receive support based on merit, viewers have to be incentivized to support the creator. Circles aims to introduce this incentive through **flexible investment** by means of 'Circulating' the content through the Circle platform.

Someone who *circulates* content will be able to choose a set amount of Circles to send when they share content. For the first fifty circulators, 90% will be sent to the content creator, and 10% will be sent to a smart contract that will then distribute the circles amongst all token holders. This is possible due to the infinitely divisible nature of Ethereum tokens. Each circulation beyond the first pays the users below with a portion of their circulation based on the weight of each lower circulator's investment. This creates a method for consumers to profit from their investment, and by extension advertisement, of a creator's content.

[1] <https://pagefair.com/blog/2017/adblockreport/>

[2] <https://poverty.ucdavis.edu/faq/what-are-annual-earnings-full-time-minimum-wage-worker>

Circulation Daily Dividends

Circles are tokens that create value in the act of sharing content you deem entertaining, informative, or deserving of praise for one reason or another. Since thousands of people can circulate content at any time, it's easy to think of a group of circulators who share the video around the same time as a strata; a good visual would be a tree with many branches.

The social nature of sharing, when compounded with the reach of certain accounts on the platform (in terms of followers, interactions, and engagement), creates an amazing space in which a simple group of ten circulators can reach several thousand in the matter of a day. Take, for instance, that group of ten. If the content creator's video represents a tree trunk that then splits into ten branches, each of those ten branches may split into more branches afterward. This method of organic growth through sharing leads to what we call 'viral content.' A mere four circulates generated per person at each stratum would reach **349,525** people by the 10th circulation strata. With the smart contract's payment formula^[1], the first investor would receive up to a **10% Return on Investment**, and each consecutive circulator afterwards would receive that same 10% return given enough investment after them. This works by dividing up Circle tokens upon circulating content to two smart contracts for distribution: **payment to content creator and payment to user**. Respectively, each pool receives 90% and 10% of the circulator's Circle tokens. An additional, small flat fee will be applied with each transaction to cover gas. The fee for gas can be understood as a utilization fee for transacting ERC20 tokens on the Ethereum network.

Being involved in content's circulation makes you eligible for daily dividends in the form of Circle tokens. Since your invested Circles advertise the content they are attached to, they provide value in the form of advertisement and are then rewarded.

For content creator:

$$P_k = \sum x_i * 0.90 - \sum p_{k-1} - gas, \text{ if } t > 1\text{day}$$

Pi = Payouts to content creator

For user:

$$y_{j,k} = \begin{cases} \left(\left(\sum x_i * 0.10 \right) - \sum y_{j,k} - gas \right), & \text{if } t > 1\text{day} \vee \left(\sum x_i * 0.10 - \sum y_{j-1,k} - gas \right) \geq z_j * 1.10 \wedge \sum y_{j,k} \leq (z_j * 1.10 - gas) \\ 0, & \text{else} \end{cases}$$

J = Current user in queue

k = Payouts when time is out.

y = Payout to user (j)

t = Seconds in a day/time period (This resets every day)

xi = All donations

∇ = For all

Payout to the first donator (j=1) when time is out. (j) is then incremented (if and only if the total of 110% is paid out) to start payout for next donator and $k \rightarrow 0$

[1] Formula subject to change during development prior to release. Read more in the contract payout PDF on circlesproject.io

The Circles Platform

Browser Extension

To appeal to a wider audience and compete directly with one of the leading creator crowdfunding platforms, Patreon, Circles will run on websites such as YouTube, Medium, SoundCloud, and other various content-hosting sites in the form of a Chrome Browser Extension. Running the extension will search open pages on domains like those listed above for a key phrase, such as *circles:0xabc123456xyz*, in the content's tags or description. Upon finding this identifier, a button located near the 'Share' feature will appear, enabling users to set their Circle amount and circulate the content on Circle's main client page, much like Twitter or Facebook.

Using browser cookies, the extension will create a localized in-browser account connected to the Ethereum network which will store Circle tokens and fetch them to use in circulates when requested. Due to the nature of Circles as ethereum-based tokens, storing them in ethereum wallets elsewhere is advised and sending Circles from the in-browser wallet will be included in the extension.

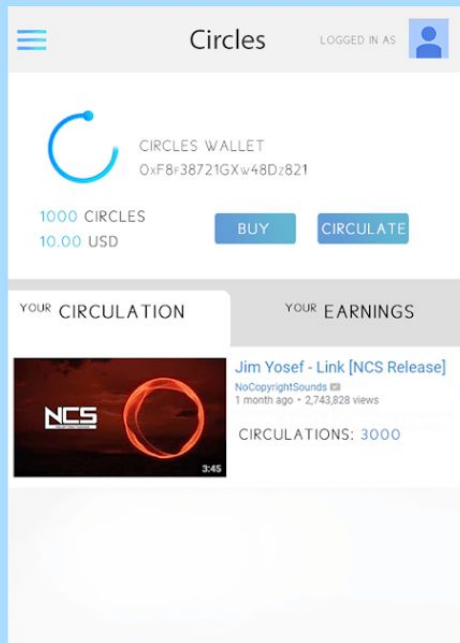
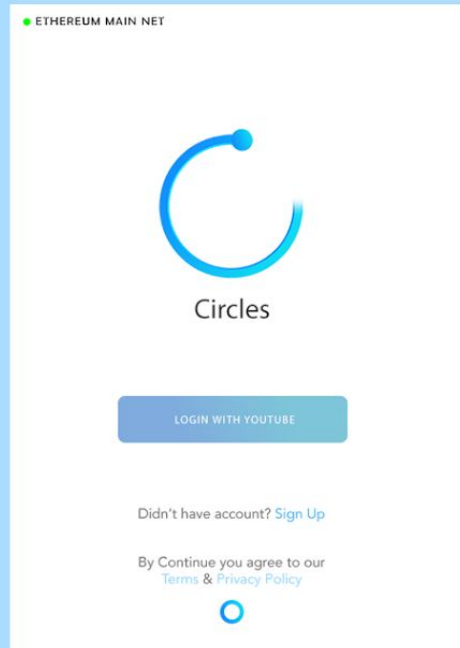
Referral Rewards

Circles are tokens that benefit from wide usage by many different token holders. For that reason, users who refer other future users to Circle and have them sign-up with their unique wallet address (or randomly generated key of some sort) will receive up to 0.25% of each circulate, in the form of fractional Circle tokens, from the new account.

The first 10,000 users who refer another user to the platform will receive a flat, one-time payout of 500 Circles to their wallet, and those who are referred to Circle by these users will also receive a total of 25 Circles each, up to 25,000,000 total.

UI/UX PREVIEW

ALPHA CONCEPT VERSION



Funding Distribution

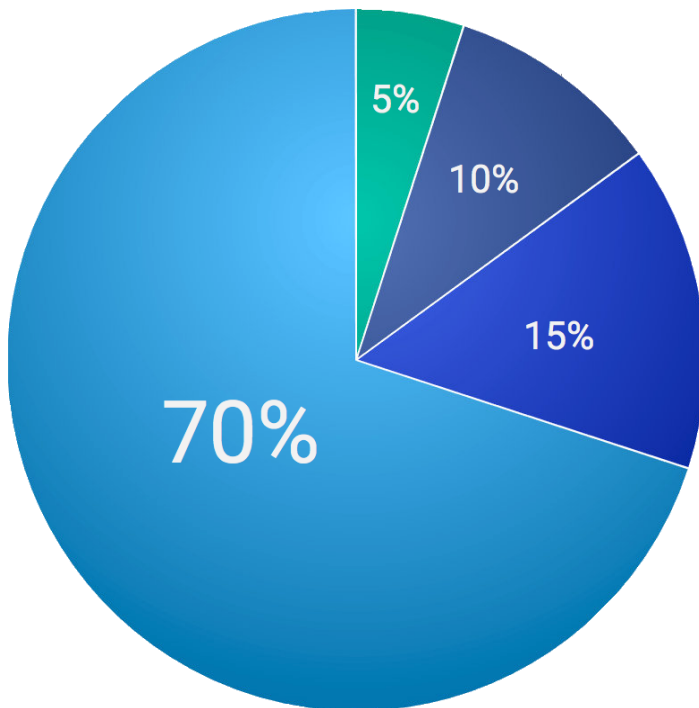
A Spending-Centric Token needs Wide Distribution

Circles is a token that intends to create value behind the act of sharing content that you deem has merit as news, entertainment, or something else. As such, it needs to be used by a wide variety of people on a wide variety of topics to create an environment that promotes content organically by what people want to invest money in.

The number of Circle tokens will be limited to a fixed supply of 500 million tokens. Because of the nature of fixed supply, the value of each token will fluctuate based on the market's supply and demand.

The demand for Circles is aimed to be based on its ability to return dividends of Circle once spent to invest and share, or circulate, content.

Circles ICO Distribution



The CRC crowdsale will begin on September 18th and will end upon reaching the \$5.25M hardcap.

Target: \$5.25 million
Supply: 500 million

- 70% crowdsale
- 15% team + advisors
- 10% user growth pool
- 5% referrals

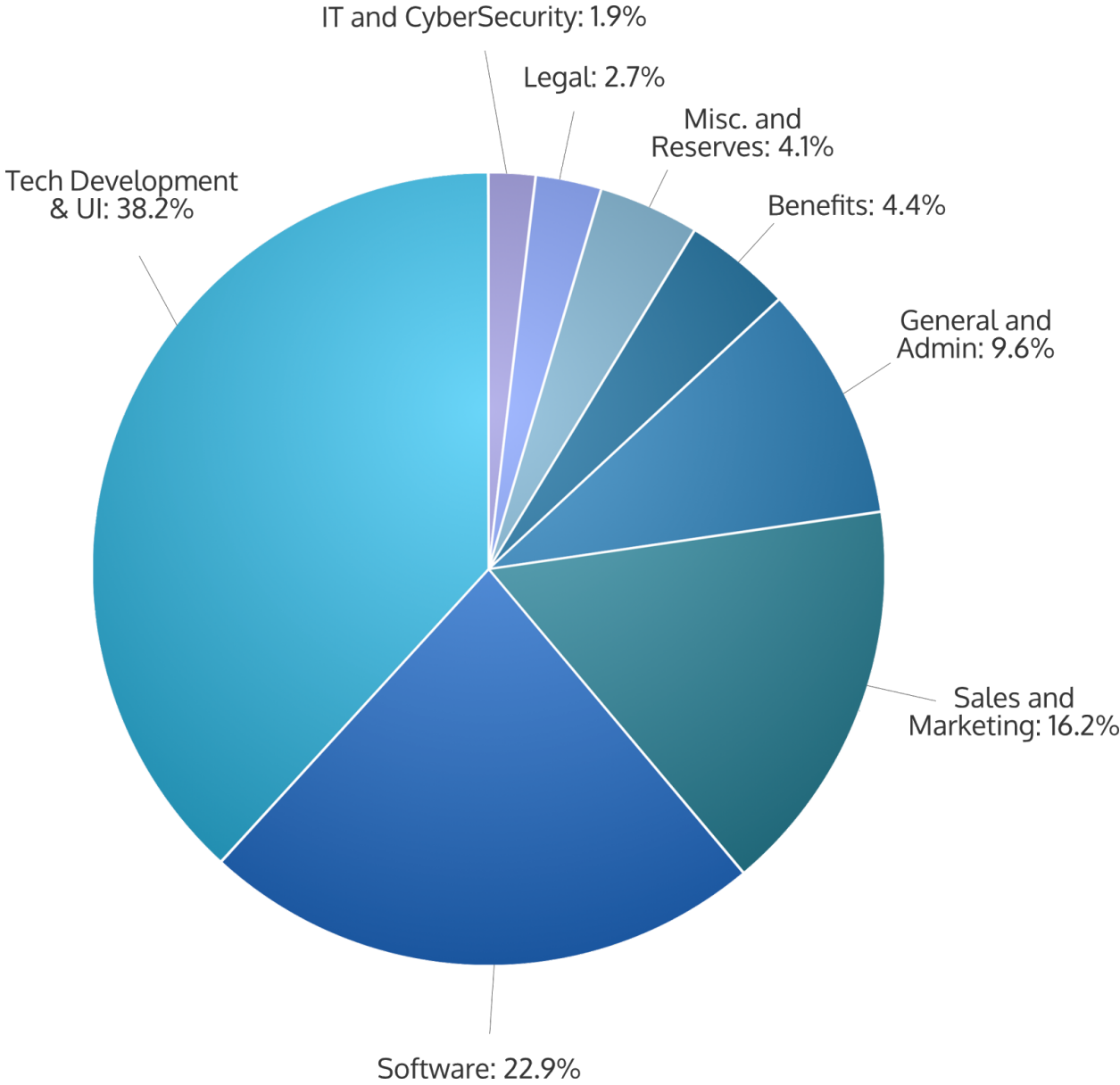
Ethereum ERC20 Token
Purchase methods: ETH

With a target of \$5.25 million, the value of CRC is notionally set at \$0.015 per token.

$$(70\% = 350,000,000 \text{ CRC})$$

$$(350,000,000 \text{ CRC} \times 0.015 = 5,250,000)$$

Crowdfund Spending Breakup



Meet the Team

Felix Watkins | Project Lead, Solidity Developer



Felix is the founder of Veon Industries, a software development and consulting company. Having worked on multiple blockchain-based projects, he brings valuable leadership, experience and passion to the Circles Project. Felix has been immersed in technology for the past 8 years with skills in programming and development.

He also is the founder of the Blockchain Wellington Meetup group in the capital of New Zealand, and has extensive experience in setting up, organizing and presenting, networking and workshop events.

Noah Marconi | Full-Stack Developer



Noah's background includes the design and building of analytical applications using R, Scala, and JavaScript along with lab focused R&D in the big data and deep learning space. A full stack data developer, he has his hands in everything from automated cleaning routines to data modeling and visualization. Recently turning to smart contract development, Noah is a welcome addition to the Circles Project Team.

Graham Kidd | Lead Advisor & Strategy



Graham is an undergraduate at the University of Georgia currently studying for his Bachelor's of Economics. His involvement with the tech sector and emerging technologies has led him to be a key advisor for the Circles Project, making sure that the end goal of the project aligns with the initial idea's vision of creating a new, organic ecosystem for both consumer and creator.



Martin Røvang | Data Scientist

Martin is doing his bachelors degree in physics at the Arctic University of Norway. He loves big data and has done several projects by himself including analysing meteor scattering and stock market analysis. He also has a background as an electrician. Martin also is passionate about physics and enjoys solving complex problems.



Preston Edwards | Front-End Developer

Preston is a freelance web designer. Always aiming to build something new, Circles Project is no exception. He is the coordinator of digital design for 97 Digital, an up-and-coming design and PR agency, and has worked with multiple companies and fundraisers. Preston's quality strengths are offering technical design with great attention to detail. With experience building websites and brand authenticity, his position is welcomed to the Circles Project.



Daniel Cassel | UI/UX Design

Daniel is a successful entrepreneur and graphics designer who has established an excellent reputation in the freelance community as a leading expert in aesthetics and professional branding. Daniel is the founder of Cassel Studios, a creative web agency and consulting company. Carrying a dedicated work ethic, and meticulous attention to detail, he enjoys creating modern user interfaces to achieve the most elegant user experiences.



John Nejamin | Communications, Back-End Developer

With past experience in marketing and computer science, John joined the Circles Project to help further the community behind it and participate in development. He started learning to program 7 years ago and has continued by expanding his knowledge across various interpreted and compiled languages. Additionally, John has been a freelance writer for multiple published sources. A notable example is his past experience being a journalist for anonymous news and informational site DeepDotWeb.

Disclaimer

This document is for informational purposes only and is not an offer to solicit securities. The Circles token is a utility token that allows for the act of circulating content on the Circles Platform. Circles (CRC) has no known outside use of the platform.