



BACKGROUND

A Decentralized Affiliate Marketing and Advertising Solution



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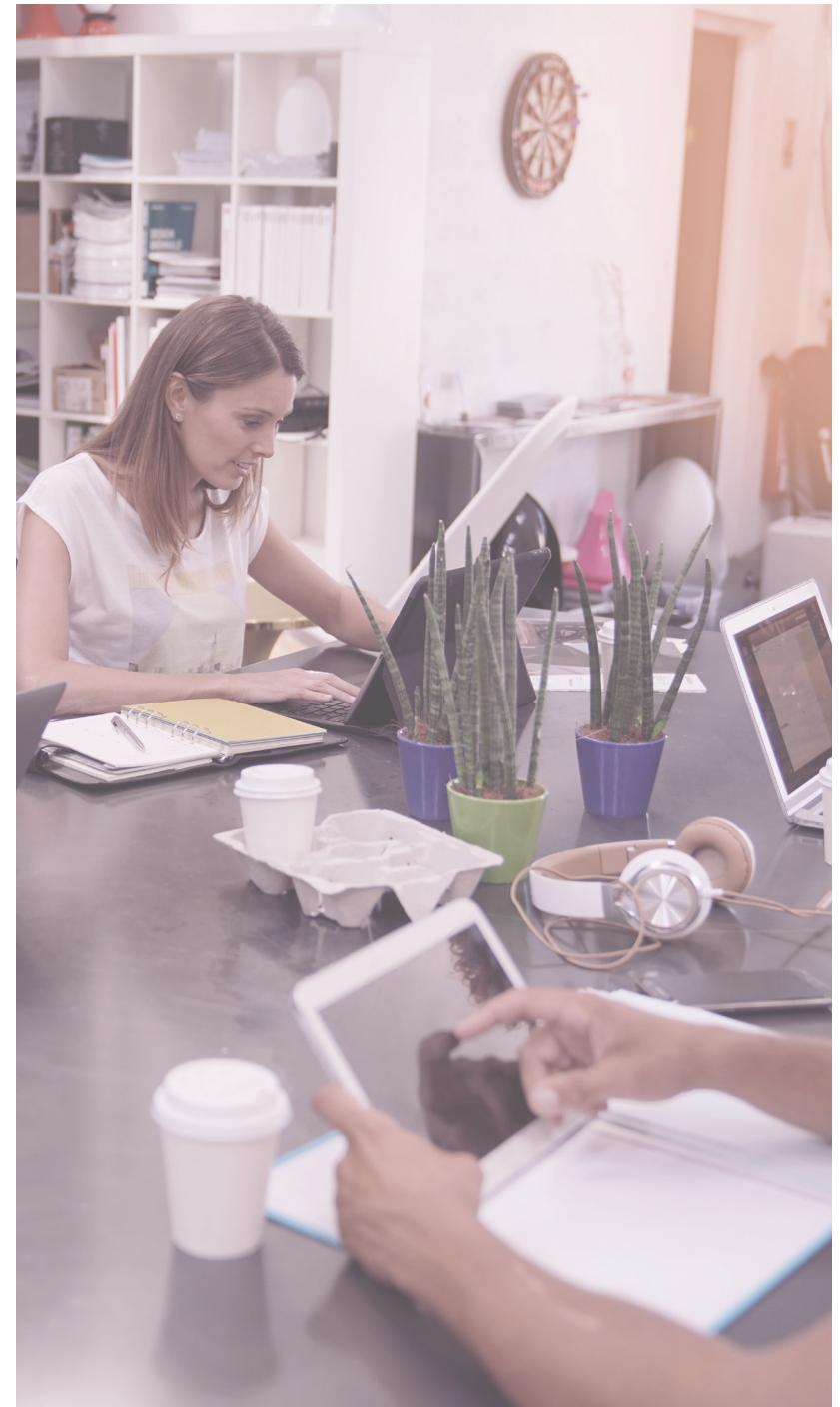
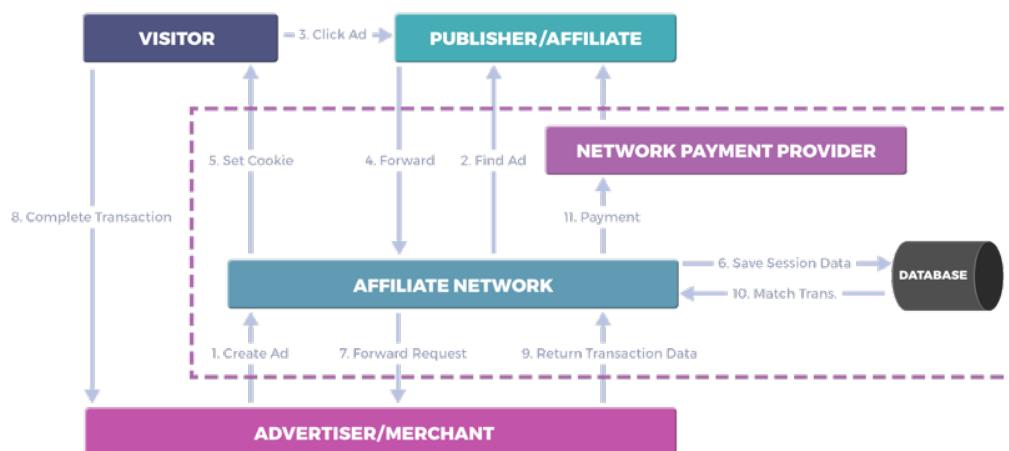
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VISION

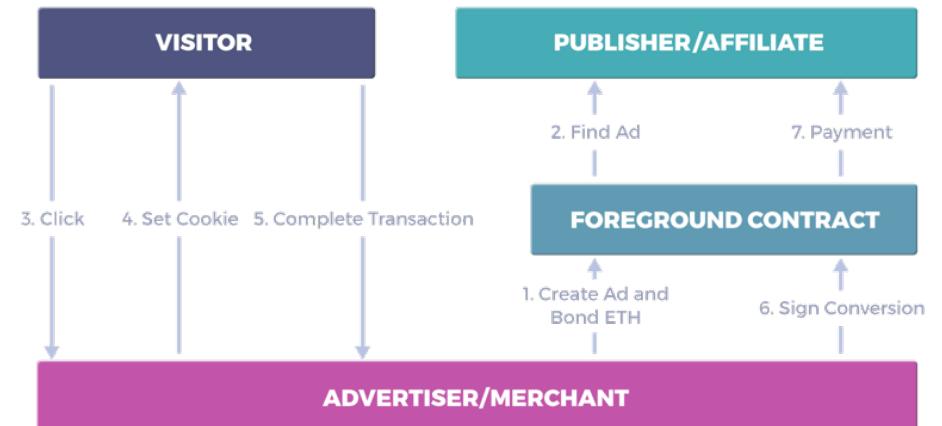
Foreground is the only affiliate marketing and advertising solution that connects advertisers and publishers on both the traditional Internet and the rapidly growing decentralized web (Web 3.0). Foreground solves numerous problems in the affiliate marketing industry by making marketing simpler, cheaper, more transparent, and providing a novel way for advertisers and publishers to build reputations based on an immutable ledger of verifiable conversion data. Our vision involves building a product that positively impacts the industry by reinstalling trust in the market for affiliate marketing, while simultaneously reducing transaction costs via disintermediation using blockchain technology.

THE FOREGROUND SOLUTION

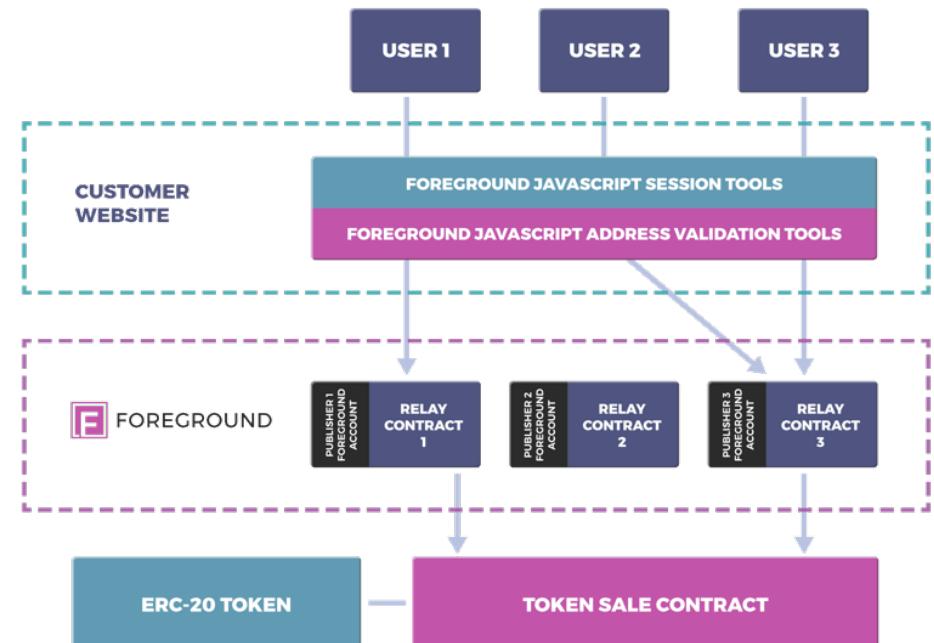
Advertisers spend nearly seven billion dollars on affiliate marketing every year, but almost 40 percent of that spend never makes it to publishers. The cause of this is a market controlled by middle men whose incentives aren't aligned with the interests of publishers' and advertisers'. Networks and service providers capture too much spend, leaving advertisers struggling to see a return on their affiliate programs and publishers struggling to convert their traffic into earnings.



Foreground removes these middle men, replacing them with a system that directly connects advertisers and publishers. Our product codifies affiliate ad services directly on the blockchain in the form of smart contracts – contracts that operate without the possibility of fraud, censorship, or abuse. Foreground revitalizes the affiliate marketing industry by making it simpler, more transparent, and more efficient.



Foreground also has functionality that allows advertisers to automatically pay publishers directly from their incoming Ether transactions. This functionality is enabled by the creation of Relay Addresses that are unique to each publisher. The relay addresses look like they are normal Ethereum accounts, but they are actually contracts that have the information necessary to split incoming funds correctly between advertisers and publishers. This functionality allows Dapps, token sales, and ICOs to host affiliate programs that do an automatic revenue share with their affiliates in a decentralized way, making everyone happy.



MARKET LANDSCAPE

Modern affiliate networks are closed off, insulated, private organizations that are expensive to operate. They charge fees commensurate with their bloat. Their chief functions are to:

- Connect advertisers and publishers
- Provide tools and technology to facilitate transactions
- Provide reporting
- Provide optimization services and training

A typical affiliate network will earn revenue in one of two ways: 1) by charging advertisers a portion of the revenue that can be attributed to affiliate generated traffic; or 2) by charging a fee that is a percentage of each affiliates commission. These fees can range from 20 to 40 percent of commission paid to each affiliate. Advertisers participate in affiliate networks in order to gain access to a large number of affiliates. Conversely, affiliates participate in affiliate networks in order to gain access to a large pool of potential advertisers. Both parties benefit from the technology supplied by the network.

It is also possible for advertisers and publishers to work directly with one another without an intermediary network. This arrangement is referred to as working direct, and is usually facilitated by off-the-shelf or cloud-based technology tools that connect advertisers and publishers via technology similar to what a network would provide.

Advertisers consider a variety of factors when deciding whether or not to manage their own affiliate program, including:

	Networks	Direct
Price	✗	✓
Control of Program	✗	✓
Program Restrictions	✗	✓
Credibility	✓	✗
Access to Affiliates	✓	✗
Support, Services, & Training	✓	✗

Foreground is a unique and novel solution that resembles a blend between these two options it exhibits many of the benefits of both approaches. In this context it can be thought of as a protocol that facilitates the direct connection of advertisers and publishers, while still providing a network-like solution for payments, discovery, and tooling.

	Networks	Direct	Foreground
Price	✗	✓	✓
Control of Program	✗	✓	✓
Program Restrictions	✗	✓	✓
Credibility	✓	✗	✓
Access to Affiliates	✓	✗	✓
Support, Services, & Training	✓	✗	✗

Price

Foreground enables extremely low advertiser costs and high affiliate commissions because the system is completely automated.

Control of Program

Individual advertisers have complete control of which affiliates are allowed into their programs.

Program Restrictions

Foreground is an open platform. Each participant decides individually who he/she would like to partner with. There is not one central network authority who determines what is or is not allowed and objectionable.

Credibility

Credibility on the Foreground network is determined by each individual participants reputation, which is based on that individuals immutable history of conversions (for publishers) or payments (for advertisers).

Access to Affiliates

Foreground has network-like discovery characteristics because it allows advertisers and affiliates to interact in a standardized way over a common interface exposed on the Ethereum blockchain.

Support and Services

Advertisers using the Foreground network must manage their affiliate programs as if they were working directly with their affiliates because they are.



WHY ETHEREUM?

The Foreground team chose to use blockchain technology because it allows for the creation of promotions and advertisements as natively digital assets that can be safely modified by many parties without the need for a complex permission system. The blockchain's immutability ensures that Foreground can build an incontestable history of paid conversions, which serves as a basis for the network's reputation system. Robust fault tolerance and native tokens for payment were also important considerations.

The Foreground team chose Ethereum, specifically, for a few reasons:

- Ethereum is the most advanced platform for the construction of decentralized apps (Dapps)
- Ethereum has the largest community of blockchain developers sharing tools, best practices, and knowledge about Dapp development
- Ethereum has the best tooling to allow the interaction with Dapps
- Ethereum is the most secure network that is built for the creation of Dapps

COMPETITION

Advertisers running an affiliate program can generally do so by using either an affiliate network or an affiliate software platform. Affiliate networks build two-sided markets (networks) of advertisers and publishers that are valuable because of their network effect. Affiliate software platforms, on the other hand, are sold business-to-advertiser and attempt to provide advertisers with the tooling they need to manage their own affiliate programs.

A list of major players is below. This list is incomplete and for reference only.

Networks

- ClickBank
- CJ Affiliate
- Avangate
- ShareASale
- Rakuten

Software Platforms

- iDevAffiliate
- Post Affiliate Pro
- OSI Affiliate



AN OPEN REPUTATION SYSTEM

A traditional affiliate application currently includes the following information supplied by the affiliate:

- Name
- Email Address
- Phone Number
- Website URL
- Website Traffic (monthly/daily visitor count)
- Tax Information

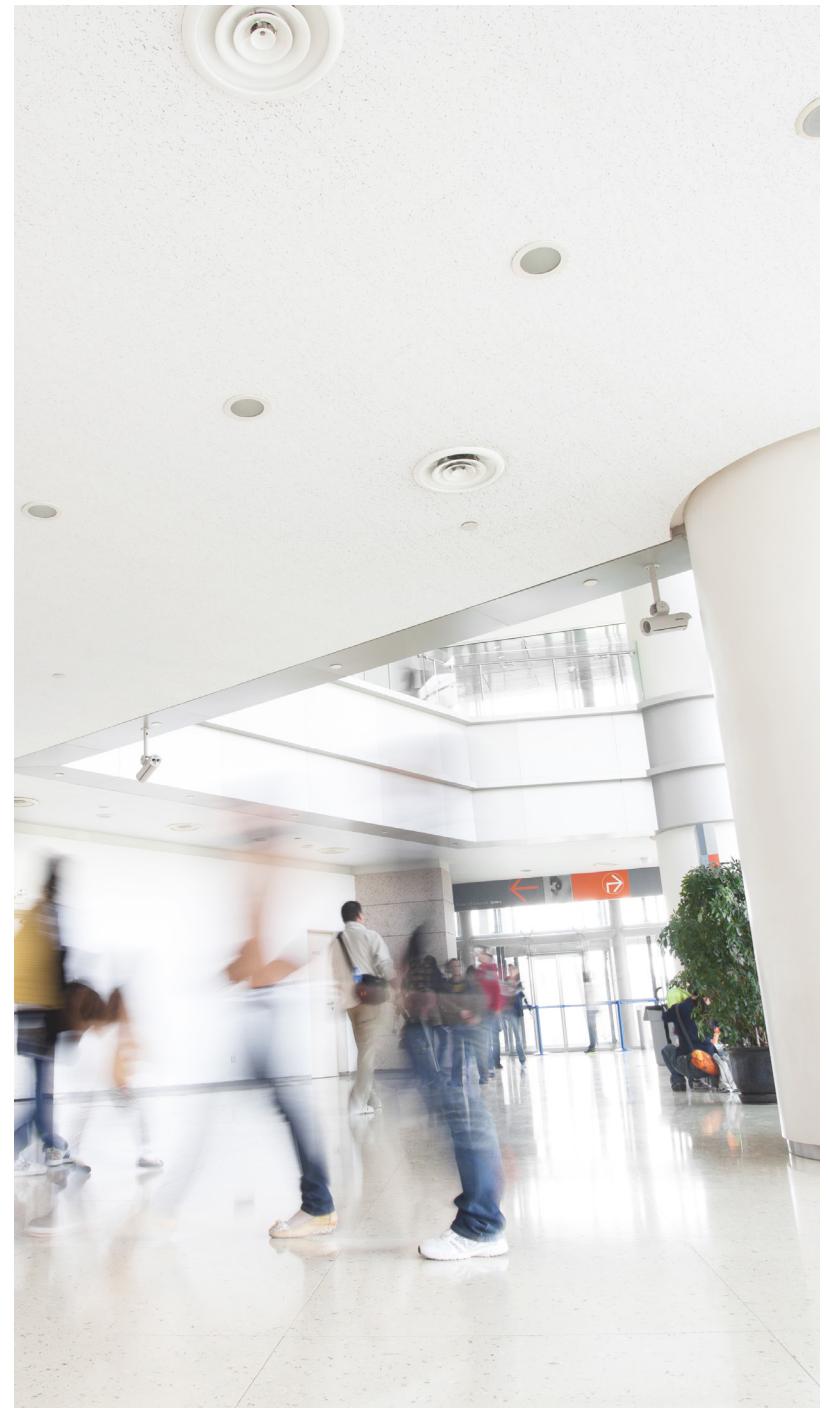
None of the information supplied by the affiliate is easily verifiable, and this information is often fraudulently entered. Additionally, the applying affiliate usually only determines the effectiveness (or ineffectiveness) of an advertiser's campaign after they have invested substantial time and effort in the campaign.

The Foreground network uses the conversion and payment history of advertisers and publishers as the basis for a reputation system. Specifically, Foreground allows publishers to see each advertiser's history of payments before deciding to host that advertiser's advertisements. Conversely, Foreground allows advertisers to see a potential publisher's complete on-chain track record of conversions as part of the publisher's affiliate application. The first version of Foreground will treat all of this data as completely public, but future versions of the system will allow publishers and advertisers to selectively reveal their reputation and transaction history (due to the sensitive nature of this data).

Foreground specifically captures the following information for each payment:

- The date and time of the payment
- The sender of the payment
- The recipient of the payment
- The amount of the payment
- Full information about the related advertisement
- Full information about the bonded Ether balance
- Blockchain specific data (block number, etc...)
- All relevant meta data

By making this data transparent and verifiable, Foreground gives advertisers and publishers the information they need to make better decisions about what's best for them and their business. This transparency weeds out poor performing affiliates, malicious affiliates, and non-paying advertisers, ensuring that the network has high quality participants on both sides of the market.



GO-TO-MARKET STRATEGY

Opportunity

Foreground's novel, transparent affiliate platform presents five major market opportunities.

A decentralized affiliate marketing and advertising solution for decentralized applications

The decentralized app (Dapp) ecosystem is currently experiencing explosive growth and current advertising and affiliate platforms are ill equipped to capitalize on this growing market. Traditional networks do not integrate well with decentralized applications because they were built to service the traditional Internet (using Internet domain names rather than ENS names, for instance). Foreground is built from the ground up to service both traditional publishers and publishers of decentralized applications. Additionally, Foreground's native, on-chain advertisements and promotions are extremely simple to install in a decentralized app – apps that already have functioning connections to the Ethereum blockchain.

A marketing tool for ICOs and token sales

ICOs and Token sales represent one of the fastest growing markets in the tech space. Over three billion dollars have been raised in token sales as of September of 2017. Foreground is the only full-featured marketing tool that is in a position to service this rapidly growing space. Raising funds via a token sale or ICO is inherently different from raising venture capital funds for a variety of reasons, but one of the most striking differences is the need for token sales and ICOs to reach a much greater number of buyers to be successful. For this reason, affiliate marketing doesn't make sense in the VC space, but becomes a critical factor of success in token sales and ICOs. Foreground has no competitors in this space.



Positioning Foreground as an option that exists between networks and selfrun affiliate programs

Advertisers currently have two choices when deciding how to run their affiliate programs. They can either run their programs themselves and be in complete control of their program, but have to build their affiliate workforce from scratch, or they can join a network, incurring high fees in exchange for better access to affiliates. An opportunity exists in creating a third option: creating an open platform where advertisers and affiliates can meet and do business via a common, smart-contract-driven interface, while still allowing advertisers to run their own affiliate program.

A first-to-market solution for verified advertiser and affiliate reputation

Current affiliate solutions do not offer proof of an advertisers history of payments or an affiliates history of successful conversions. An opportunity exists to be the first affiliate solution that allows advertisers and publishers to have historical performance data available when deciding who to partner with.

An extremely low cost affiliate offering

Because the Foreground affiliate network exists only as fully automated computer code, the cost of participating in the network can be greatly reduced when compared to traditional affiliate networks. Marketing a close-to-free solution for advertisers allows Foreground to position itself as a service that you have little to lose by trying. Ultimately, low costs for advertisers allow higher commissions for affiliates.

Initial Target Market

An affiliate network that requires advertisers and affiliates to transact in Ether and Ether-based currencies will have difficulty recruiting enough participants that are familiar enough, and comfortable enough, with the technology. Foregrounds initial target market is narrow and deep, and we expect early adopters to be those who are already transacting in Ether and are already comfortable with blockchain technology. These parties can be separated into two groups:

Advertisers

Advertisers participating on the Foreground network would be required to run full ethereum nodes on their web servers, or utilize Foregrounds trustful HTTP interface. These participating advertisers would also have to understand the concept of Ether, believe in its value, and be comfortable in the exchange rate risk inherent in holding Ether. For these reasons, the most likely early advertiser participants in the Foreground network will be those advertisers that already run Ethereum nodes. Major cryptocurrency exchanges, cryptocurrency service companies, retailers who already accept cryptocurrency payments, and those already offering cryptocurrency affiliate programs would be best suited for early partnerships.

Affiliates

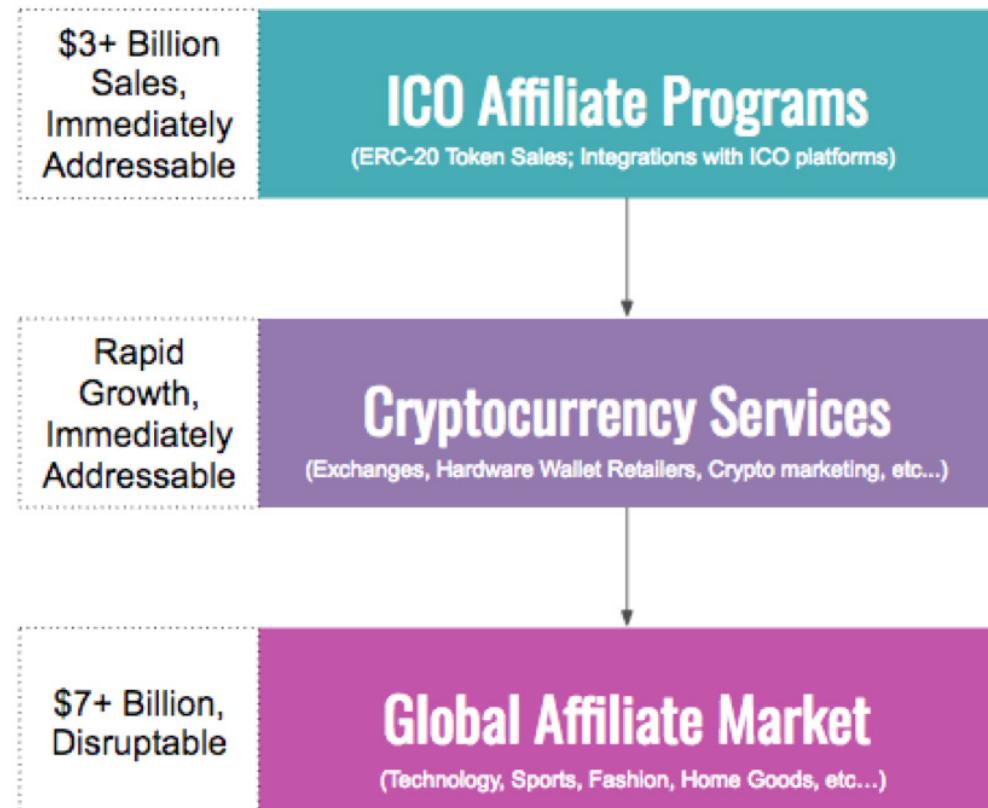
The barrier to entry for affiliates is lower than that of advertisers. Affiliate participants in the Foreground network require an Ethereum wallet to get started. They must also believe that Ether is a valuable and reasonable form of payment for their services as affiliates. Many affiliates would also likely have a desire to ultimately sell their Ether for some form of fiat currency, so probable affiliates must also be comfortable selling Ether via an Ether marketplace or exchange. Given these attributes, the most likely early affiliates on the Foreground network are users who already possess Ether wallets/addresses and are looking to earn Ether using the Foreground platform. These likely affiliates fall into two subcategories: those who are already publishers on the traditional Internet (with a high likelihood of publishing technology-related content), and creators of decentralized applications. This second group – creators of decentralized applications – will soon be searching for decentralized advertisements in order to monetize their traffic.

Immediately addressable markets

There are two immediately addressable markets for Foreground's decentralized affiliate marketing tools: the market for ICOs and the market for cryptocurrency-based products and services. A third market opportunity lives in the possibility of disrupting existing affiliate players by offering a tool that is lower cost, more transparent, and more fair. Each of these three market opportunities is attractive, and each on their own provides ample room for Foreground to prosper.

Market and product timing

Foreground operates with the advantage of being at the epicenter of the cryptocurrency boom. The technology, tooling, and organizational infrastructure required to build a product like Foreground are just now in their infancy. Additionally, the cryptocurrency space is still small enough to enable easy personal connections and partnerships, but large enough to be a market worth tackling. Foreground is especially well situated by having a tangible product among competitors who have chased the cryptocurrency boom and are simply selling vaporware.



Differentiation

The key differentiators of the Foreground network are:

- Decentralized app and blockchain compatibility
- An open reputation system
- Cryptocurrency as a means of payment

Decentralized app and blockchain compatibility

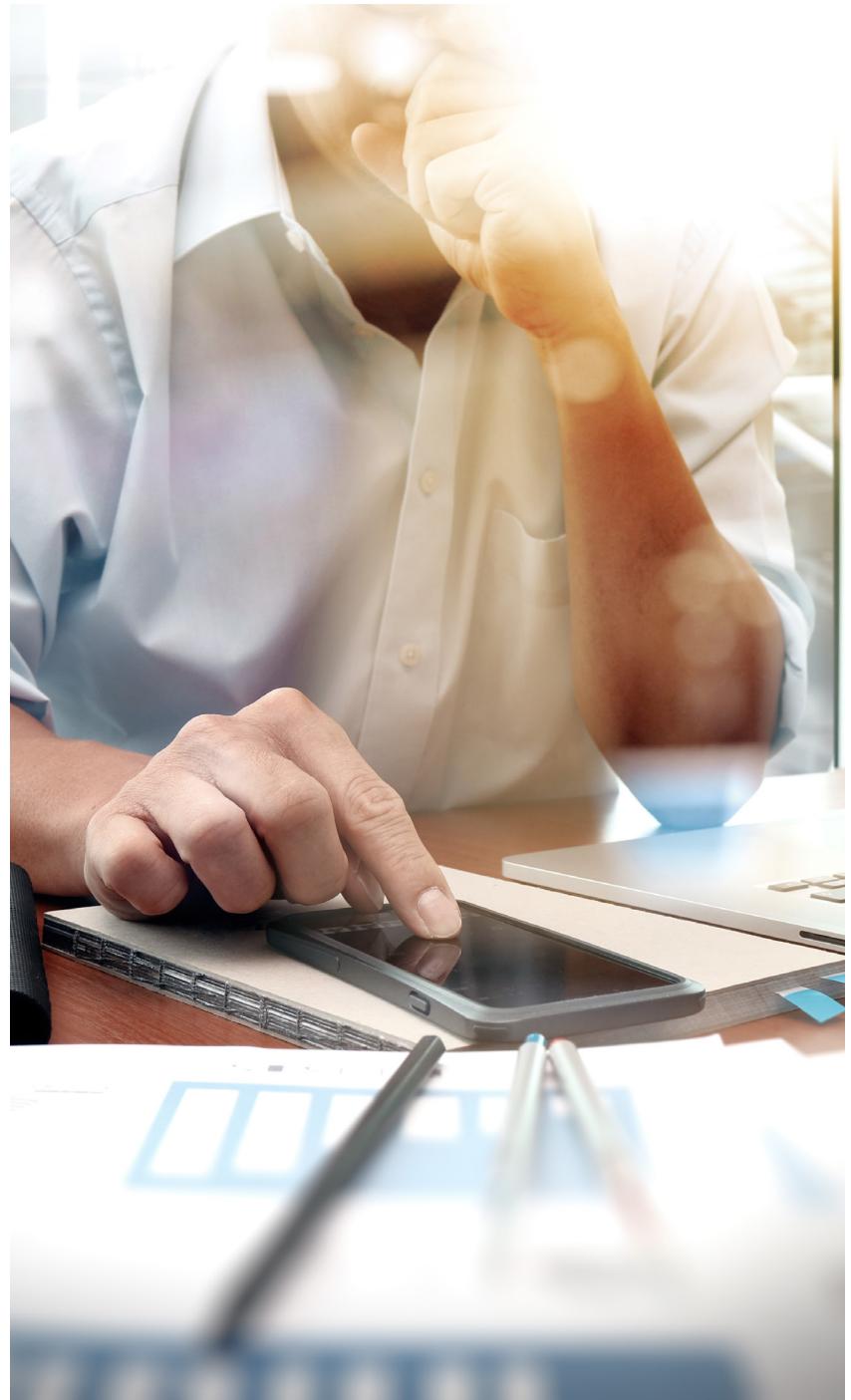
Foreground is well positioned to capitalize on the explosive growth of the decentralized app ecosystem. Advertising and promotion solutions built on and for the traditional Internet are not well suited to meet the needs of publishers of decentralized applications. Advertisements and promotions hosted on Foreground are easy to integrate into decentralized applications built on Ethereum because decentralized applications already have access to the raw blockchain data that serves as the foundation of the system.

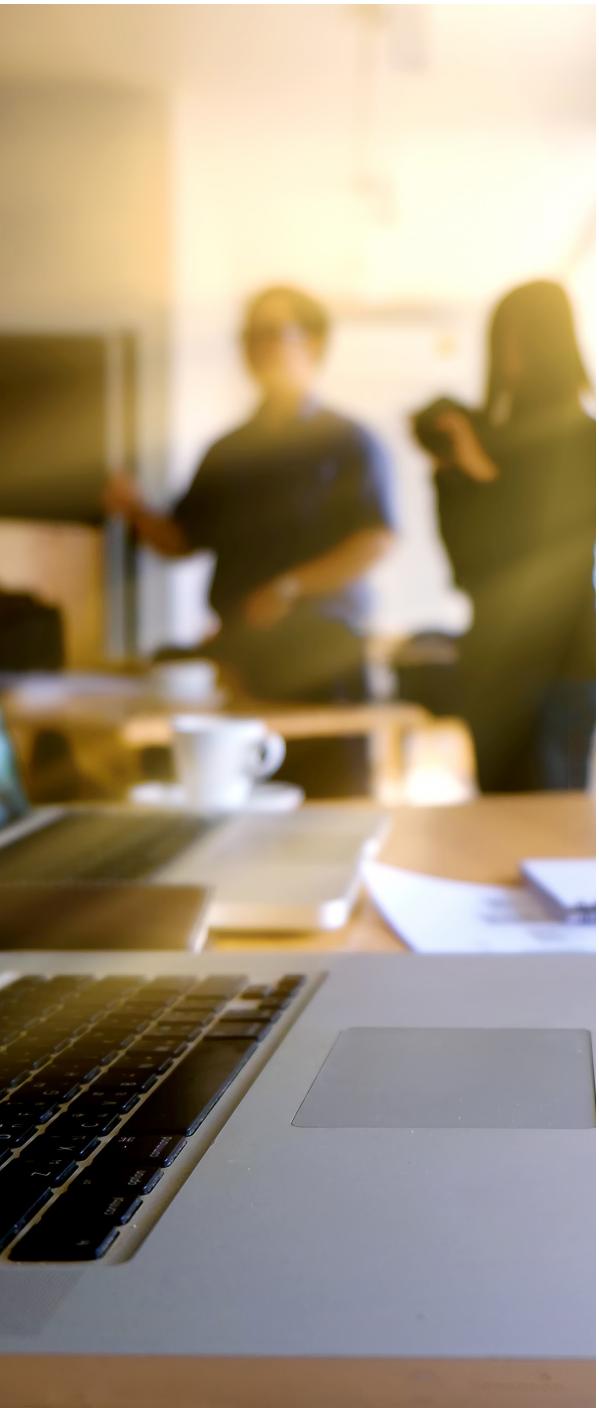
An open reputation system

Foreground will be the only tool on the market that offers completely open and transparent affiliate data. It is the only tool that allows for the public retrieval of an advertisers' or publishers' history of payments or conversions, making it the first reputation-based affiliate offering on the market.

Cryptocurrency as a means of payment

Foreground is the only advertising network that uses a major cryptocurrency as a means of payment and compensation for network participants. This allows for low-cost payments between parties and pseudo-anonymous interaction with the Foreground platform.





Risks

Adoption Networks succeed by establishing a critical mass of participants. Any newly formed network that involves the buying or selling of goods and services is at risk of dying before both sides of the market reach this critical mass. Foreground intends to achieve critical mass by initially focusing on a narrow but deep target market – cryptocurrency-based businesses (both advertisers and publishers) and Ethereum enthusiasts.

Ethereum Platform

The Ethereum network is nascent, experimental, and largely unproven. Right now it is the most advanced blockchain for the construction of decentralized apps. There is a substantial risk inherent in developing on a new technology and it is unclear whether Ethereum will scale to support a universe of decentralized apps. Additionally, processes for the deployment and updating of Dapps are not well defined. Foreground will be following current Dapp development best practices to mitigate this risk.

Ecosystem

The success of the Foreground network is closely tied to the success of the Ethereum network. It is unrealistic to believe that a decentralized application built on top of Ethereum could survive if the underlying technology was not successful. In particular, Foreground uses Ether as the token to facilitate payments on the network, so Ether maintaining its value is critical to the ongoing operation of the Foreground network.

TIMELINE AND FEATURES

January 20, 2017

The Beginning

The first lines of code for Foreground are written.

May 4, 2017

Prototype

The prototype of Foreground is already finished. An early, working version of the prototype was presented to the Chicago Ethereum Meetup group on May 4th, 2017. This prototype contained functionality that allowed promotions to be persisted to the Ethereum blockchain, a payment system, simple publisher tools, and basic reporting capabilities. It is a fully functioning Dapp.

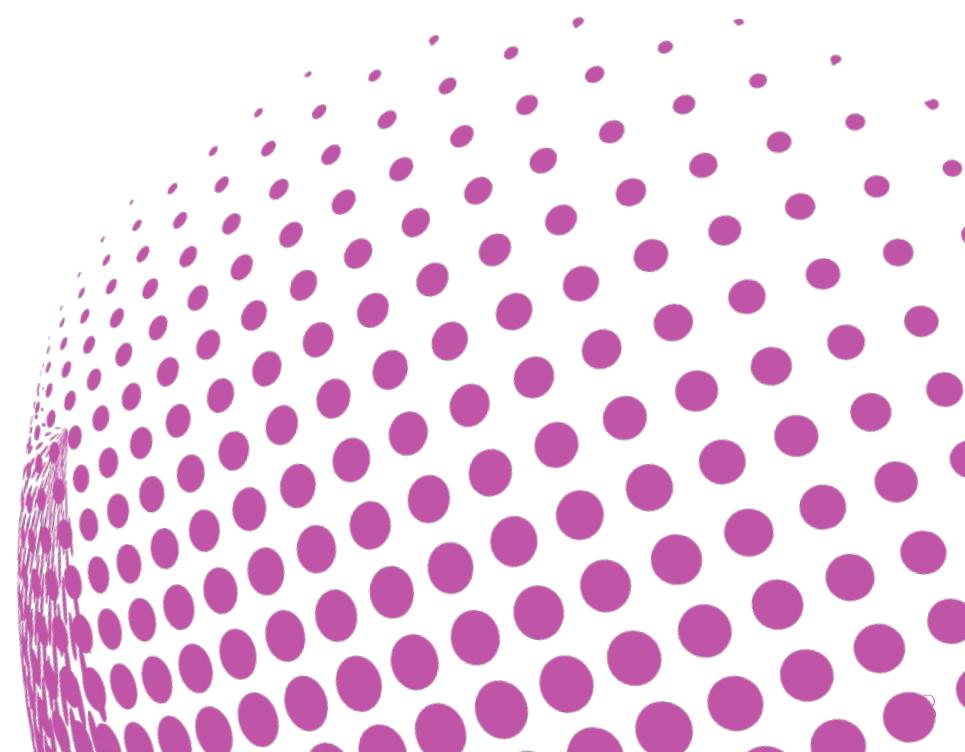
- Advertisements and Promotions
- Payment System
- Publisher Tools
- Basic Reporting

November 2017

Beta

The Foreground beta will contain features specifically designed for token sales and ICOs, including the ability to establish smart contract powered affiliate programs that integrate directly with ERC-20 token sale contracts. The beta will support 300x250 image ads as well as reporting tools that are more advanced than those presented in the prototype. The beta version of Foreground will be deployed to production and will be used for Foreground's own token sale.

- ICO and Token Sale Affiliate Programs
- 300x250 image format
- Advanced Reporting



Estimated: 3rd Quarter of 2018

Version 1.0

Version 1.0 of Foreground will contain advanced features for advertisers such as the ability to selectively approve conversions and the ability to set up tiered payouts. Version 1.0 will also include advanced reporting tools for advertisers and publishers, as well as support for multiple different attribution models.

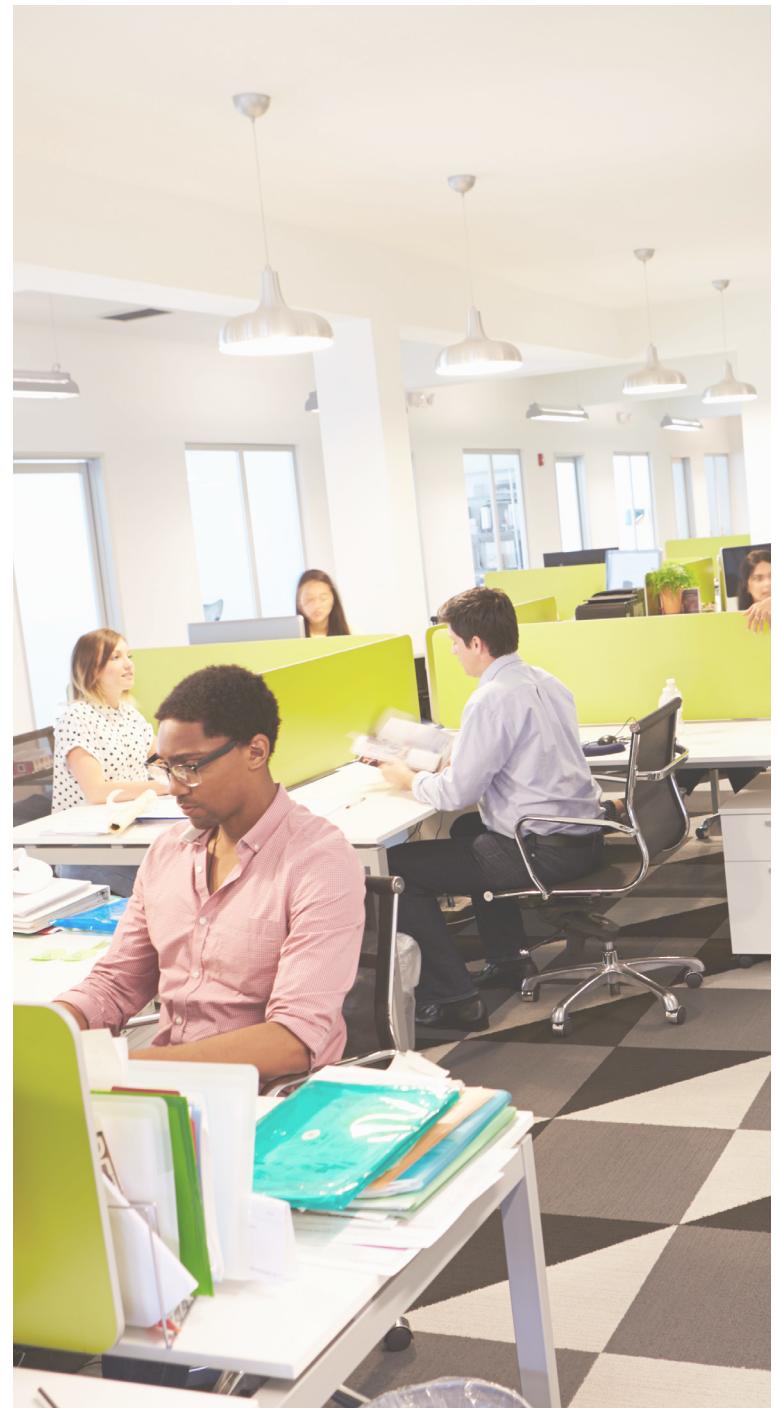
- Whitelisting Publishers
- Tiered Payouts
- Manual Conversion Approval
- Additional Reporting Improvements
- Multiple Attribution Methods

Date TBD

Future Versions

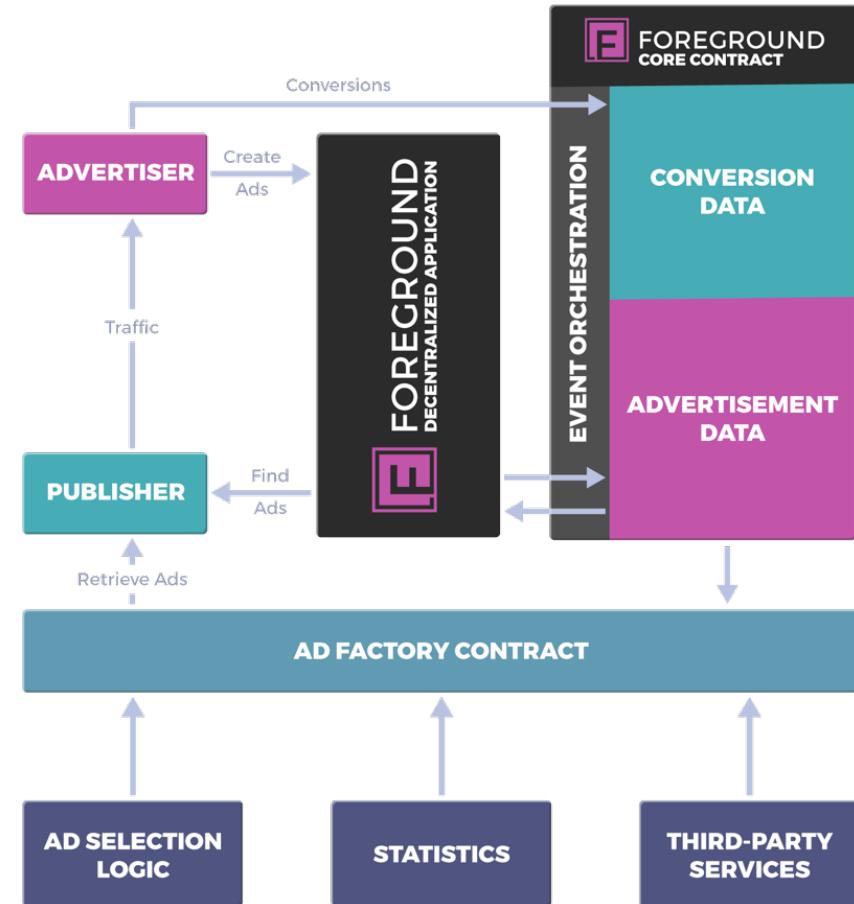
Future versions of Foreground will include support for video advertisements/promotions, tiered payout systems, features that will allow efficient handling of 2nd layer solutions.

- Video Ads/Promotions
- Support for Stable Coins
- Prep for 2nd Layer Extensions
- Other Features



COMPONENT OVERVIEW

This diagram shows an overview of the components of the Foreground system. This architecture is already in place, powering the fully functional end-to-end prototype/MVP. This is merely a reference architecture that may or may not resemble the final architecture as features are added.



Foreground has been designed so that it can be used in a fully trustless manner by Dapps. It also has well understood trust-points when used by advertisers and publishers on the traditional Internet. The Ad Factory component provides a mechanism for Publishers to utilize off-chain data to make decisions about which ads to display. Publishers are able to choose which Ad Factory implementation they trust, if any.

DEAL TOKEN SALE

Foreground DEAL tokens allow advertisers to get discounts on promotions created through the Foreground Decentralized Application (Dapp). Promotions can be created with or without DEAL tokens, but advertisers that use DEAL tokens will have their promotions featured more prominently on the Foreground Dapp. More importantly, each Foreground DEAL token provides a 80% discount on Foreground's fees for advertisers, up to a maximum of 0.5 ETH. DEAL tokens are burned when they are used and no new DEAL tokens will ever be created after the initial offering. DEAL Tokens will be sold for 0.08 ETH during the token sale, with discounts for early purchasers.

At a Glance

Total Issuance:

450,000 Token total supply

333,000 Max tokens sold to the public -- 20,000 Token floor/minimum

Redemption Value:

1 DEAL Token = 80% off fees up to a maximum 0.5 ETH

Token Sale Price:

1 DEAL Token = 0.05 ETH

Symbol: DEAL

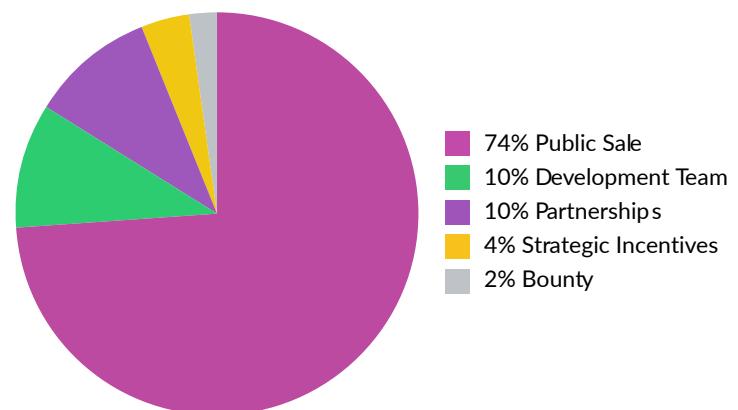
First tier - 0.05 ETH

Second tier - 0.06 ETH

Third tier - 0.065 ETH

Fourth tier - 0.07 ETH

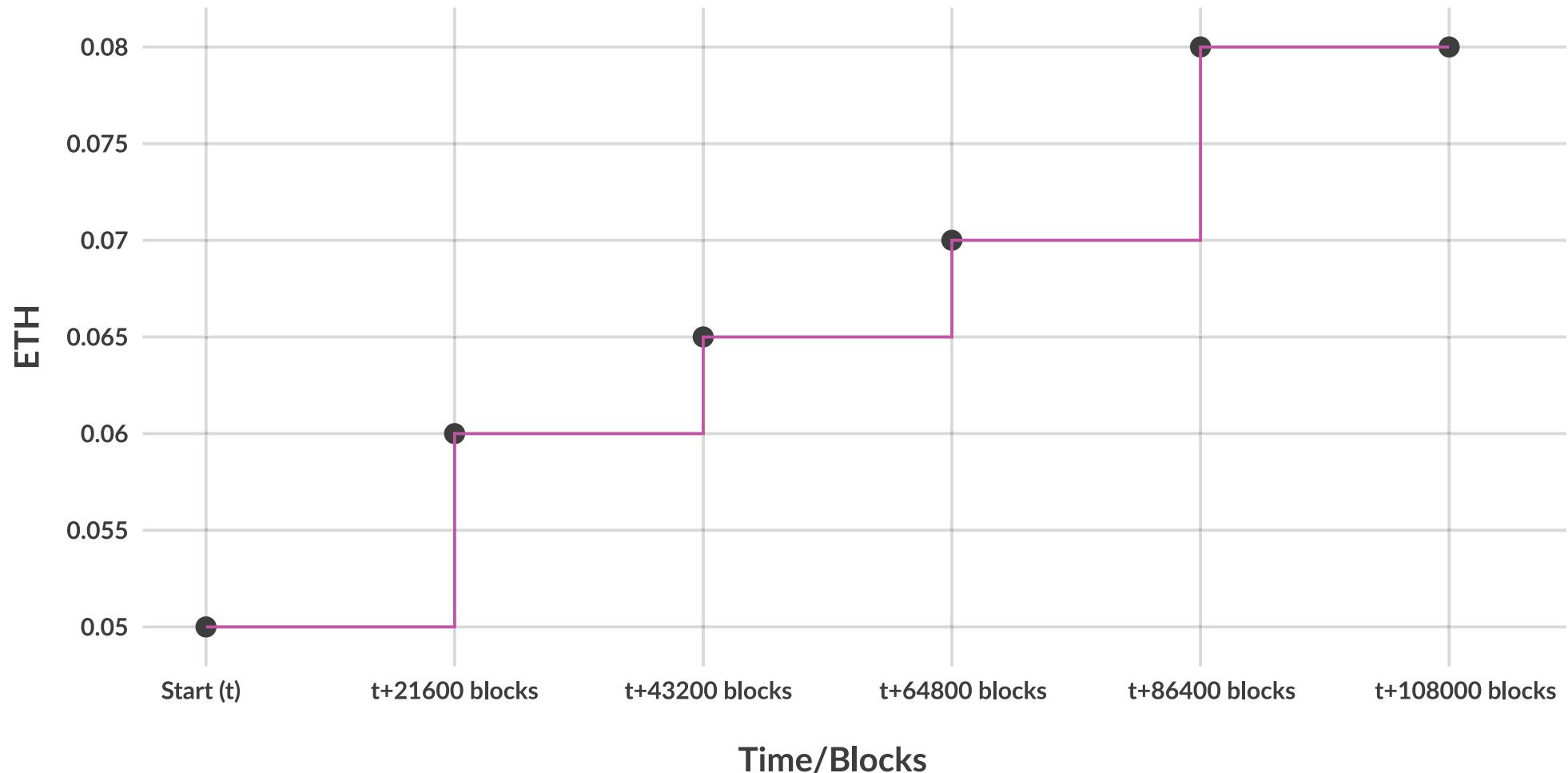
Fifth tier - 0.08 ETH



DEAL Token Bonuses

Early purchasers of DEAL tokens will be rewarded with bonuses. These bonuses will start at 60% for the earliest purchasers and will reduce every 21600 blocks until it is zero by the end of the sale.

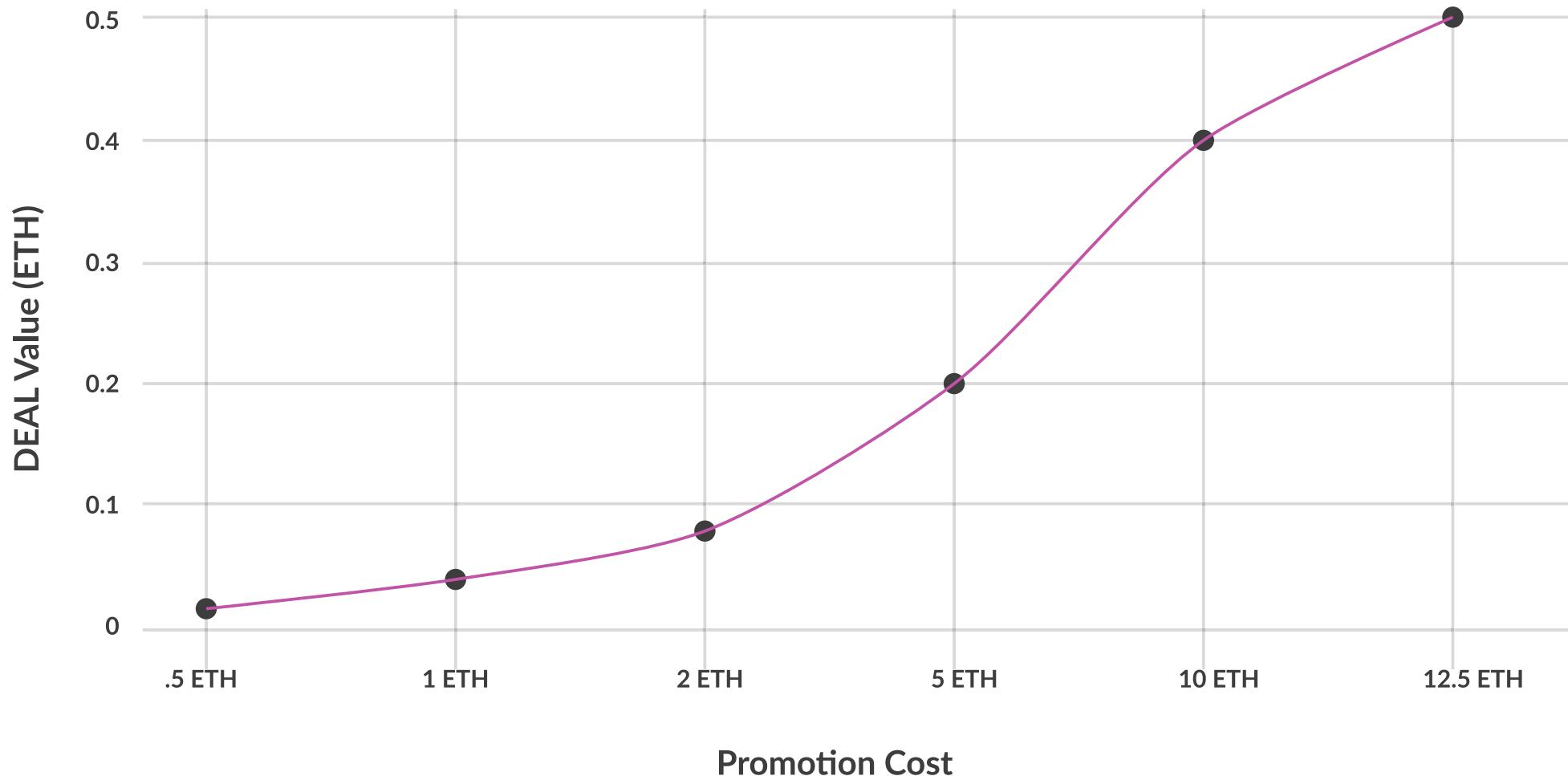
Price of DEAL During Sale



DEAL Value Correlated to Platform Use

This chart indicates the redemption value of DEAL tokens for hypothetical advertising purchases and shows how the redemption value of DEAL tokens fluctuates with the usage of the Foreground platform. This chart assumes a 5% Foreground fee, which is subject to change.

DEAL Value Rises with Use

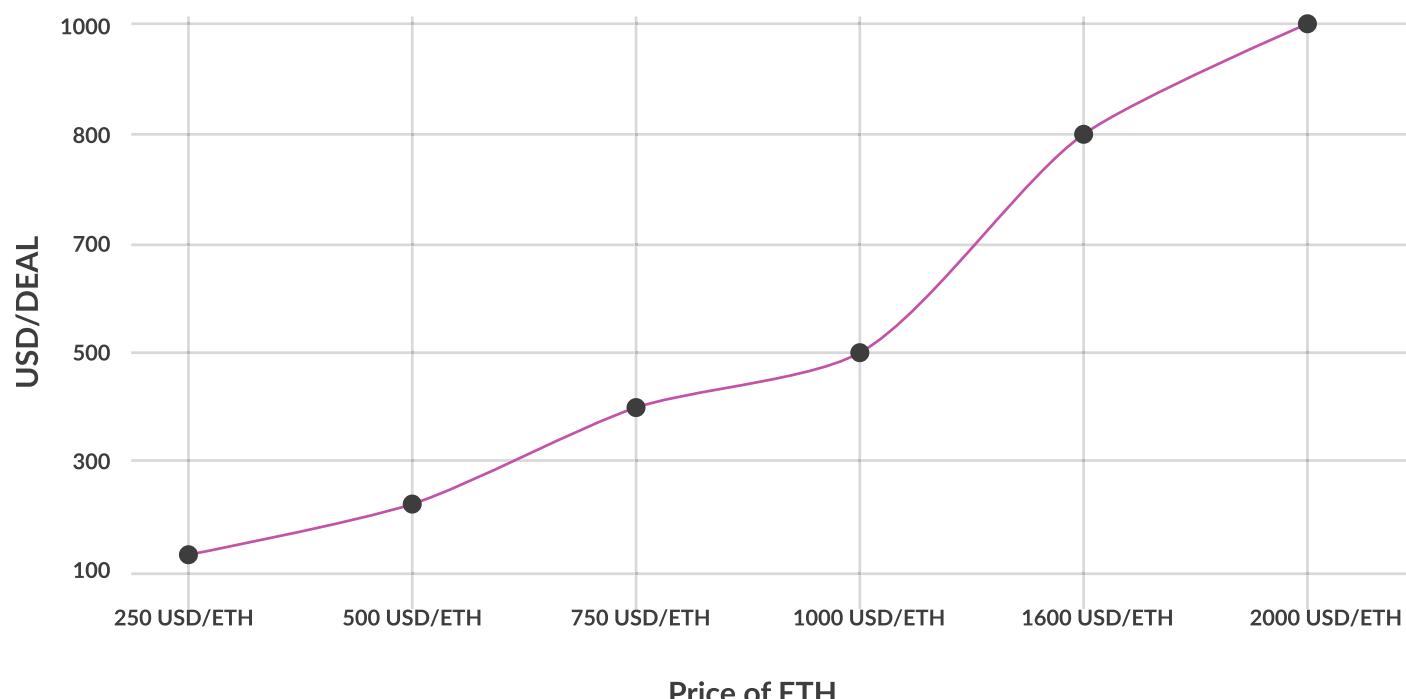


DEAL Value Correlated to the Price of Ether

The USD value of each DEAL token is also dependent on the price of Ether because the token's value is denominated in Ether. Below is a table that indicates the maximum redemption value of each DEAL token at different Ether prices. The table also illustrates the difference between this USD price and the price required to acquire DEAL tokens in the token sale. The below table and chart assume an Ether price of 250 USD/ETH at the time of the token sale.

ETH Price	Max Coupon Value	USD Value Compared to Token Sale Price
250 USD/ETH	125 USD	10x
500 USD/ETH	250 USD	20x
750 USD/ETH	375 USD	30x
1000 USD/ETH	500 USD	40x
1600 USD/ETH	800 USD	64x
2000 USD/ETH	1000 USD	80x

DEAL Value Rises with ETH Price



DEAL Value Correlated to Platform Use

Below is a table that indicates the redemption value of DEAL tokens for hypothetical advertising purchases and shows how the redemption value of DEAL tokens fluctuates with the usage of the Foreground platform. This table assumes a 5% Foreground fee, which is subject to change.

Advertisement Cost (ETH)	DEAL Token Value
0.5 ETH	0.02 ETH
1 ETH	0.04 ETH
2 ETH	0.08 ETH
5 ETH	0.20 ETH
10 ETH	0.40 ETH
12.5+ ETH	0.50 ETH

An example: Andy is launching a token sale. He wants to promote his token sale by running a 100 ETH promotion on Foreground. He buys 4 tokens in the Foreground token sale for 0.05 ETH per token, for a total purchase price of 0.2 ETH. Andy later redeems his tokens for discounts on his Foreground fees. His tokens are worth 80% of his Foreground fees up to a maximum of 0.5 ETH per token. In Andy's case, his tokens will be worth the maximum of 0.5 ETH. Before redeeming his tokens the price of Ether triples, making Andy's tokens worth exactly 30 times more than he payed for them in the token sale. His tokens are burned on redemption, reducing the total supply of available tokens. This example assumes a 5% Foreground fee.

Andy's Purchase Price	.05 ETH
Value of Token for 100 ETH promotion	0.5 ETH per Token (max)
ETH Price at time of Purchase	200 USD
ETH Price at time of sale	600 USD
USD Value Multiple of Token Sale Price	30x

A second example: Tom is launching a token sale. He wants to promote his token sale by running a 50 ETH promotion on Foreground. He buys 2 tokens in the Foreground token sale for 0.05 ETH per token, for a total purchase price of 0.1 ETH. Tom later redeems his tokens for discounts on his Foreground fees. His tokens are worth 80% of his Foreground fees up to a maximum of 0.5 ETH per token. In Tom's case, his tokens will be worth the maximum of 0.5 ETH, exactly 10 times more than he payed for them in the token sale. His tokens are burned on redemption, reducing the total supply of available tokens. This example assumes a 5% Foreground fee.

Tom's Purchase Price	.05 ETH
Value of Token for 50 ETH promotion	0.5 ETH per Token (max)
ETH Price at time of Purchase	300 USD
ETH Price at time of sale	300 USD
USD Value Multiple of Token Sale Price	10x

A third example: Bob owns a business that sells t-shirts online. He wants to promote his business by running a 10 ETH promotion on Foreground. He buys 1 DEAL token in the Foreground token sale for 0.05 ETH, for a total purchase price of 0.05 ETH. Bob later redeems his token for a discount on his Foreground fees. His token is worth 80% of his Foreground fees, or 0.4 ETH, exactly 8 times more than he payed for it in the token sale. His token is burned on redemption, reducing the total supply of available tokens. This example assumes a 5% Foreground fee.

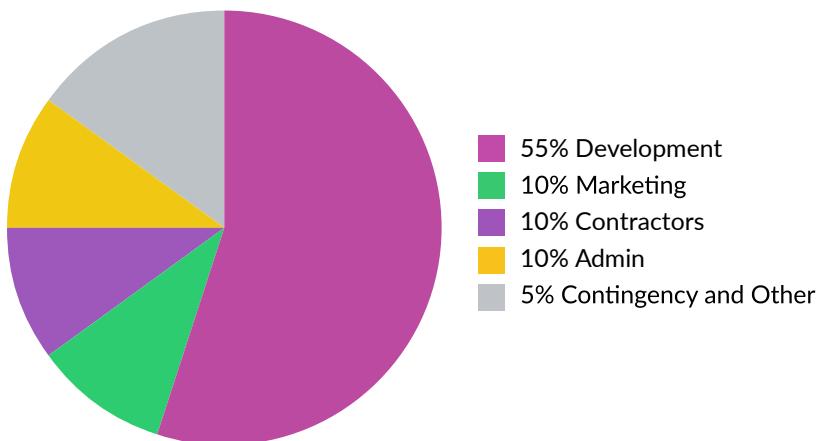
Bob's Purchase Price	.05 ETH
Value of Token for 10 ETH promotion	0.4 ETH per Token (max)
ETH Price at time of Purchase	350 USD
ETH Price at time of sale	350 USD
USD Value Multiple of Token Sale Price	8x

Fund Allocation

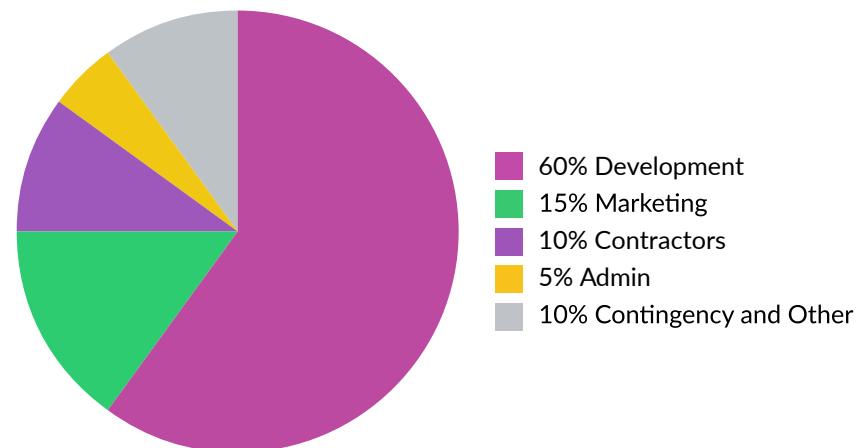
Exactly 333,000 DEAL tokens will be offered to the public via a sale automated by smart contract. The start of the DEAL sale will be announced via the [Foreground website](#). Upon conclusion of the sale, the total number of DEAL tokens reserved for Foreground partners, the Foreground development team, strategic incentives, and the bounty will be calculated. 4% of total DEAL tokens will be allocated to Foreground LLC and used as incentives for early partners. 10% of DEAL tokens will be allocated to Foreground LLC for distribution to the development team. 10% of tokens will be allocated to early partners. 2% of tokens will be allocated to bounty participants. Assuming all 333,000 tokens are sold to the general public, a total of 450,000 tokens will be created.

Funds raised through the sale of tokens will be used as follows:

55% Development
10% Marketing
10% Contractors
10% Admin
15% Contingency and other.



These values reflect the fund usage assuming up to 2.5 million USD raised. Funds raised in excess of 2.5 million USD will go primarily toward marketing and accelerating the development timeline. These allocations are subject to change and are wholly at the discretion of Foreground LLC. A forecast of the fund usage assuming the hard cap is reached is below.



TEAM



Rick Feiner **Founder and CEO**

Rick has over a decade of experience leading large enterprise software development projects. Rick founded Foreground because he wants online marketing to be simpler and more effective.



Sergey Iljin **Technical Architect**

Sergey has over 10 years of experience building enterprise software. He joined Foreground because it is a great application of technology that elegantly solves many problems in online advertising.



Shane van Coller **Technical Architect**

Shane has over 8 years experience building and architecting enterprise web applications. His interest in the Blockchain technology lies in its ability to provide an immutable, trustless and transparent alternative to traditional database backed web applications.



Evan Roth **Technical Advisor**

Evan is a diverse technologist who has spent the last 15 years leading enterprise development teams in various industries. His current interests include building distributed apps and helping clients make sense out of their data with data lakes.



Scott Nelson **Business Development**

Scott Nelson has several years of experience as an investment professional and trader at Morgan Stanley. He is an entrepreneur who joined Foreground this summer to lead the company's Business Development efforts.



Michael Grandy **Designer**

Michael has spent the majority of his career working in advertising. Upon discovering cryptocurrency via Satoshi Nakamoto's white paper, he found himself captivated by blockchain technology. He has since then been an active participant in the crypto community.



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