Plato

The next generation decentralized social network

V 1.0

Aug. 2017

Overview

Plato is a revolutionary decentralized social network powered by the blockchain technology. Plato aims to create a secure and autonomous social platform and to provide unbreachable privacy for its users. Meanwhile, to conquer the limitation and barrier of traditional social platform, Plato introduces an economic incentive mechanism for users to get attention from people they are interested in. In Plato, you can meet anyone you want.

Plato connects people in a peer-to-peer network. With decentralization, the whole network is self-governed, and free from external influence. User will enjoy a reliable, stable, and zero-downtime service. Meanwhile since there is no centralized server, no one will be collecting users' data and everything is encrypted with the private key only possessed by the user. In this way, every message is only viewable between send and receiver. No one else will be able to peek the content.

In Plato, users are the rule-makers. They have the ultimate power to make decisions. Plato aims to create a democratic world, in which users can choose the prospective path of the network. In particular, users can vote with the Plato token (PAT) to influence the future of the community.

Plato will provide the developer tool-kit once the basic functionalities are implemented. There will be special incentive programs for developers to create third-party plug-ins to build Plato eco-system.

1

Censorship

And

government intervention

○ Facebook, twitter, and Instagram are blocked by the Great Firewall of China. People in China are deprived the privilege to become part of the global community.

○ WeChat enforces real world identity verification before users can use the service. WeChat is becoming a surveillance tool for Chinese government to monitor people in China and arrest people for discussing sensitive politic topics.

○ Plato creates a highly fault-tolerant, censorship-resistant, zero down-time platform. No entity can stop the distribution or use of Plato, and users can go truly anonymous, no one will be able to watch you.

2

User data breach / Illegal selling data by the service provider

○ Ashley Madison experienced massive user data leak in July 2015. As a result sensitive user data like credit card information and home address were obtained by a malicious hack group and were later used in blackmailing its users.

○ Baidu (The largest search engine in China) sells the user data to unlicensed advertising companies and the data were often used in illegal activities like fraud.

○ In Plato, all the sensitive information are encrypted with user's private key and only user can access it.

3

Unsolicited advertisement

○In Weibo (Twitter in China), users have to pay to block advertisements from showing up on their homepage.

○In Plato, users can get paid PAT if they choose to view advertisement. (Or they can block Ads completely)

4

Inefficiency in getting new friends.

○In Tinder, user A and user B have to both swipe right to send messages to each other. If one of them swiped left, there is no way for the other party to proceed.

○In LinkedIn, you can send message to anyone but you might very likely get ignored since popular users receive hundreds of messages per day. It's difficult for users to expand their network connection.

○ In Plato, there is no barrier between people. With economic incentive mechanism, users can get attention from anyone they are interested in, and message receivers can use smart contract to customize filtering rules to prevent spamming.

Social activities are part of people's life. Research shows on average people spend one hour everyday on social network. In essence, social activities can be categorized into two types. One is motivated by emotion, like people just feel like spending time together because of they are mutually attracted to each other The other type is social motivated by reward. We engage in social activities because we want to get tangible and intangible rewards. Individuals seek out rewards in interactions with others and are willing to pay a cost for said rewards. Under this model Plato Token (PAT) can be used to settle such reward. Of course, actual social activities are dynamic and can be a combination of both types. Plato also provides a interface for people to smoothly transit from one to the other.

1) Social motivated by emotion.

Most people participate in social activities fall into this category. Human beings are sensitive creatures, and have the innate need to belong. We want to stay connected with our friends, and further develop friendships. Meanwhile we want to expand the existing social group we are in and know more new friends.

Plato provides a perfect solution for this case. Users can stay in touch with friends and send instant messages in Plato. More importantly, Plato introduces a one-way whitelist mechanism that prevents spamming and serve as a smooth way for users to know new friends. In Plato, anyone can whitelist anyone. But one can send message to another user if and only if the former is in the latter's whitelist. In Plato, each user can choose to upload a simple profile and make it visible to the whole network. Users can browse other user's profile and if interested, put him/her in the whitelist, the latter will receive a notification and decide whether to whitelist former as well. Plato also provides location-based searching for users to browse other user's' profile in certain regions. In this way Plato finds a balance between private network like WhatsApp and open network like Facebook/twitter. Every user can choose to only interact with people he/she already knows, or he/she can keep browsing other user's profile and expand the social circle.

Example use-cases:

Alice and Bob are good friends in real life. After whitelisting each other they can send instant messages to each other. Since all the messages are end-to-end encrypted. They can speak freely on any topic they feel like without worrying their message get intercepted and inspected by a third party.

Alice does not know bob in real life. One day Alice sees Bob's profile and becomes interested, so Alice whitelists Bob in the hope of knowing him. Bob receives the notification and is attracted to Alice and whitelists her as well. Therefore they are able to send message and get to know each other.

2) Social motivated by reward:

Plato As mentioned before, in Plato you can get attention from anyone you are interested in. Thanks to the smart contract powered by the blockchain, Plato introduces an economic incentive mechanism that allows each user to send message to anyone while ensuring the receiver will never get spammed. Each user can use a human-friendly interface to customize a smart contract to set rules for receiving messages from people not in the whitelist. The rule can specify how much PAT deposit each message has to come with and for how long such deposit need to be frozen. The user would receive the PAT deposit each time making a reply and the sender has to repeatedly making deposit until being whitelisted by the receiver. The deposit will be unfrozen if no reply is made within the given time. With this efficient anti-spam filtering rule, Plato creates a transparent, highly accessible, and reliable social platform.

Example use case:

Alice is using location-based searching in Plato, and she finds a user, Bob, within three miles. Alice is attracted to Bob's profile description and wants to know more about Bob. So Alice whitelists Bob and sends Bob a message together with a 100 PAT deposit to draw his attention. To Alice delight, Bob accepted the PAT and replied promptly. After some interactions Bob whitelists Alice as well. Alice gets the chance to further develop the friendship with Bob.

Alice is a founding a startup in silicon valley. She needs guidance from successful entrepreneur to make strategic decisions for the company. However she has no available resources to get in touch with any entrepreneur. Therefore Alice turned to Plato. She learned a CEO of a famous startup is an active user on Plato, and the deposit threshold for any incoming message is 1000 PAT. So she sends a concise description of her startup with the given amount of PAT. It turns out the CEO is amused by her idea and provides some insightful advices.

3) P2P Advertising

Advertising is one of most important components of the traditional social network. It is a major source of revenue for the service provider. However, users are exploited and abused in this case. They don't have the right to say no to ads. The user experience is greatly impacted and the service provider is taking all the profit.

As a decentralized world, Plato will revolutionize advertising by introducing a p2p model. Advertiser can publish ads to user directly without going through publisher. Advertiser can broadcast the ad, and for each delivered message has to come with a certain amount of deposit. All these publishing fee advertiser is paying will go directly to users viewing the ads. To make it more efficient, advertiser can make rules to publish ads to accounts with certain range of Plato token. (like only pushing the ads to account with more than 10000 pat). Meanwhile, users can choose to block ads below some amount of publishing fee, (can set this amount to infinite to block all the ads) and will receive the ad publishing fee for every ad he views. This two-way selective p2p advertising increases efficiency and accuracy for advertiser and give s economic compensation to users viewing ads.

Example use-case:

Alice just opened a juice bar. To make her business known in the community, Alice sends out 5 pat as coupon to each Plato user within 5 miles, together with the juice menu. Within a week, there is a considerable increase in daily revenue.

Bob is an advertising manager for a high-end luxury auto brand. To publicize the latest model, bob broadcasts the new model commercial and test drive info to all the users in Plato with more than 100000 pat balance. In this way bob is able to publicize the brand to the targeted customer group.
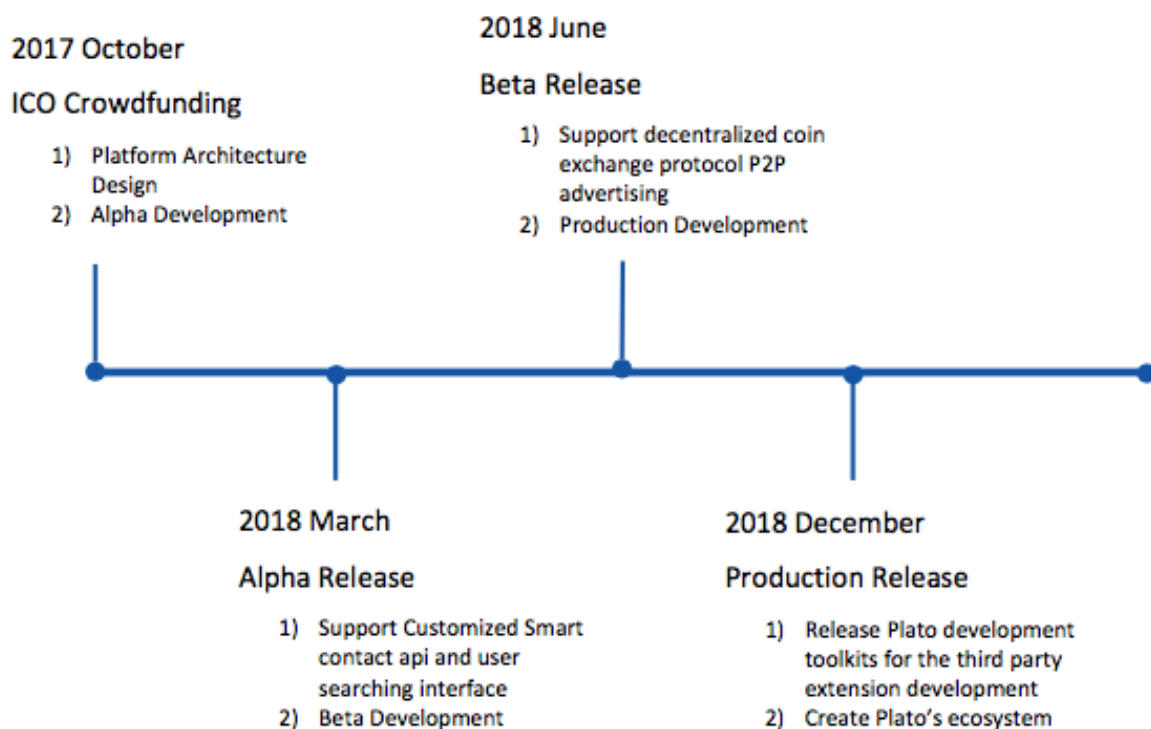
Charles does not like ads at all. So Charles sets the deposit threshold for any incoming ads to infinite. Neither Alice nor bob would disturb Charles.

4) Anonymous payment

One major use case of Plato platform is PAT payment. You can use PAT to pay friends, family, and business partners. All those payment will be instant and indisputable, and secured by the blockchain. However one drawback is that all the transaction record will be public and unencrypted on the blockchain. An adversary can track the transaction record and stage a correlation attack to unveil a user's real world identity. This is a potential threat to user's privacy. Plato aims to create a trust-free and identity-safe network. Plato supports a decentralized coin-mixing protocol, obfuscating the link between public address and the transaction related to it. Meanwhile Plato supports Tor, onion routing protocol to keep your real IP address untraceable. In this way user can make payment with ultimate anonymity.

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Alice is a wholesaler and Alice uses Plato to negotiate price and business arrangement with other retailers. Alice takes Plato Token as payment because transactions on Plato is instant, reliable and has no limit. Yet Alice doesn't want the detailed transaction amount and the payment address of her clients to go public. Therefore Alice adopts the Plato decentralized coin-mixing protocol, allowing her clients to make payments in an undisclosed way. Plato helps Alice secure clients privacy and her own business confidential information.

Road Map

The road map for Plato is shown below. We plan to launch Plato Token ICO by the end of Sept 2017. Plato Alpha version will be released by March 2018. Alpha version will support smart-contract-based spam filtering mechanism, user search interface, and secure messaging protocol. Plato Beta will be released by June 2018. Beta version will support decentralized PAT Mixing protocol, and P2P advertising. Production release will take place on Dec 2018. We will also release Plato developer tool-kit for contributors to develop third party plugins and build Plato eco-system.

2017 October

ICO Crowdfunding

1) Platform Architecture Design
2) Alpha Development

2018 June

Beta Release

1) Support decentralized coin exchange protocol P2P advertising
2) Production Development

2018 March

Alpha Release

1) Support Customized Smart contact api and user searching interface
2) Beta Development

2018 December

Production Release

1) Release Plato development toolkits for the third party extension development
2) Create Plato's ecosystem

PAT Allocation Summary

● 60% of PAT created during the contribution period will be allocated to the public contributors sending in BTC/ETH.

● 25% of PAT created during the contribution period will be allocated to the team of Plato.

● 10% of PAT reserve, locked by Plato Foundation，will be periodically offered to new contributors at a later date.

● 5% of PAT will be allocated for bug bounty.
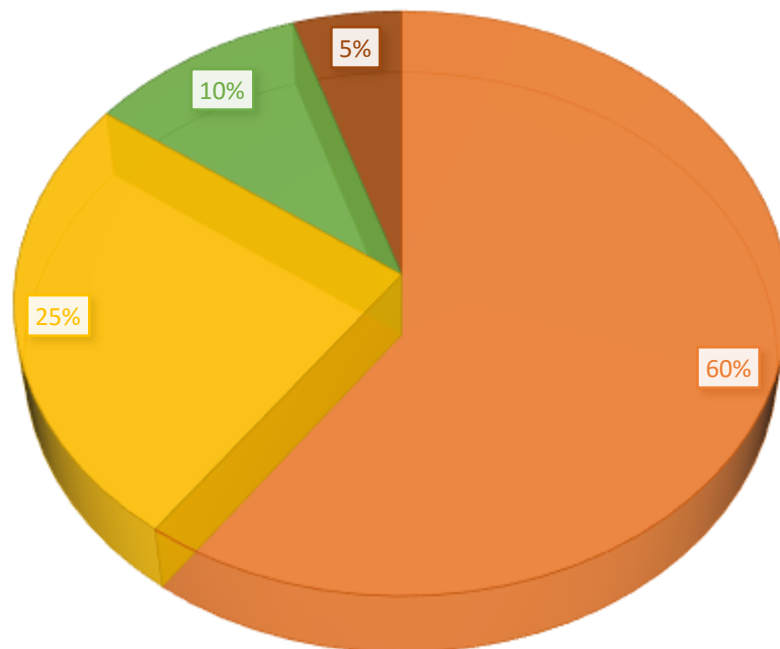
Plato employees will be granted restricted PAT upon employment. These PAT will be eligible to vest upon the satisfaction of a service condition. The service condition is vested over four years, with the first 20% vested upon the completion of Crowdsale, second 20% vested on the one year anniversary of vesting commencement date and the rest of 60% vested monthly thereafter, subject to continued employment.

Crowdsale Fund Allocation

The budget from Crowdsale fund will be allocated for the following purposes by the foundation:
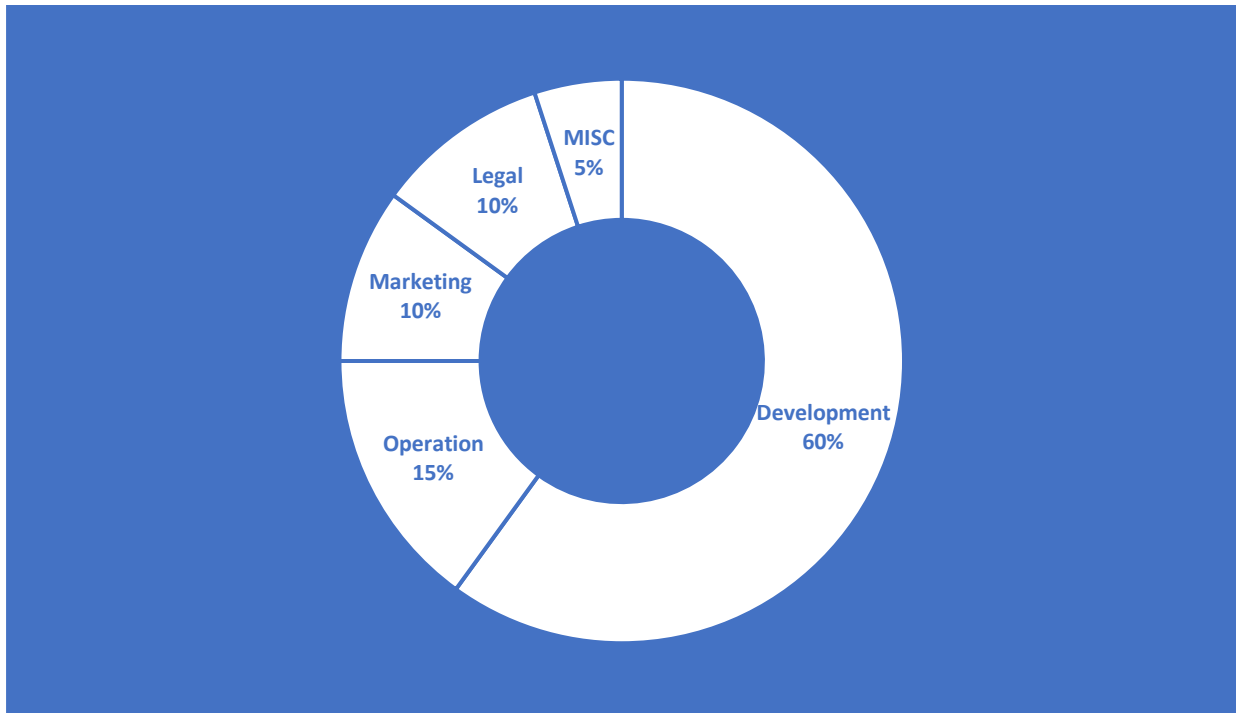
● Product Development: this funding will be allocated for recruitment, team building, and research and development.

● Operation: To ensure that day-to-day operations continue running smoothly as the organization expands, a greater focus will be placed upon processes, and the hiring of additional operations managers will be required

● Marketing: Branding and marketing operations are critical to promote Plato to potential customers for growth. We will allocate the funding for promoting Plato social network platform.

● Legal: legal service is needed to ensure the regulatory compliance. We will allocate the funding for general legal advice and emergency legal services.

● Miscellaneous: Miscellaneous expenses that exclude all above expenses.