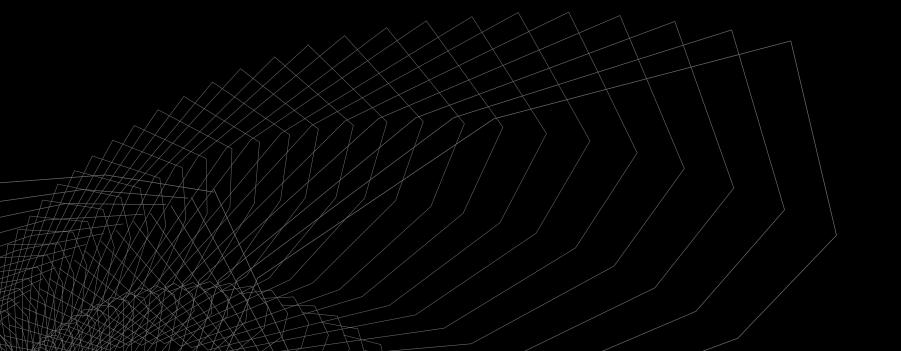


Atlas Protocol Light Paper

Defining blockchain interactive advertising & marketing



version: 0.9

2018-10-18

Motivation



With the rapid growth of the Blockchain industry we are seeing continuous rollouts of blockchain projects. However, as of today, there is very little interaction can be done on blockchain other than balance transfers. Even though we have Smart Contracts that enables Dapps, a good mechanism for information transferring and discovery is still to be defined.

There are prior attempts trying to solve digital advertising's problem with Blockchain technology, however, Blockchain economy has its own advertising problem to be solved. It is impractical to promote Blockchain projects in Internet since digital advertising industry can not profile Blockchain addresses and current Blockchain could not support complicated interactions required by advanced advertising practices.

Hence a better infrastructure is needed to help define ways of identifying, activating users and conveying information along with value. Nebulas Labs (Nebulabs) and xGoogler Blockchain Alliance (xGBA) has jointly incubated Atlas Protocol (ATP) to close this gap in the blockchain ecosystem. ATP is tasked to build a Blockchain native interactive marketing infrastructure so to enable information flow freely on chain and also to explore new ways of on-chain interactions.



Protocol Overview

Atlas Protocol proposed a new Blockchain native media for value ranking and circulation via advertising. ATP aims to connect advertiser, publishers(e.g, DApps), Blockchain users with on-chain interactions via Atlas Ads.



Atlas Protocol components includes:

- Transaction Interactive Element (TIE): Interactive elements build on top of Blockchain transactions
- Atlas Targeting Rank (ATR): Value ranking mechanism based on on-chain activities
- User Data Protection & Incentive (UDP): Mechanism to protect user privacy from abuse as well as include users into the value circulation by rewarding user for engaging in on-chain interactions.

Protocol:

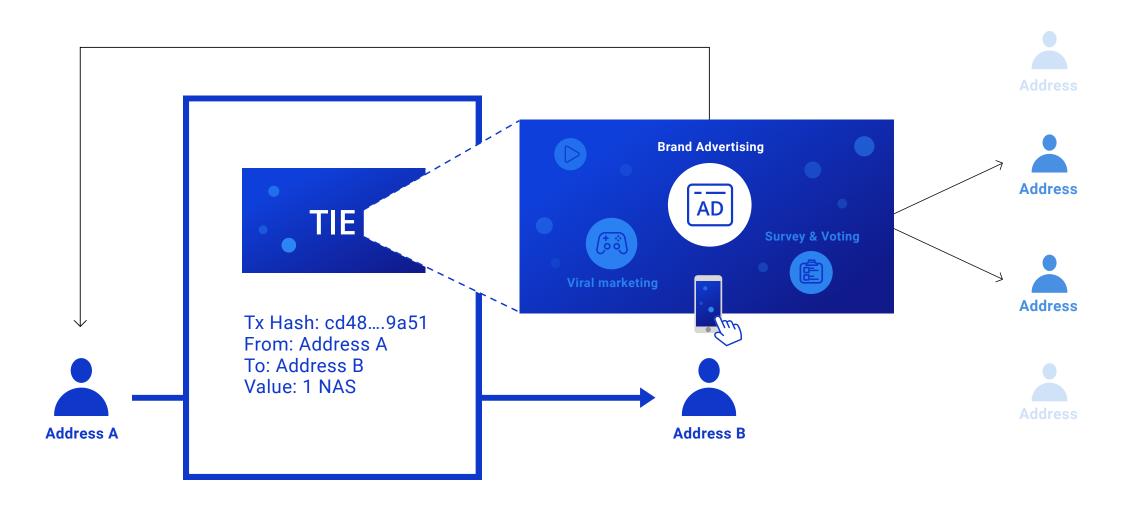


Transaction Interactive Element

In Atlas Protocol, Transaction
Interactive Element (TIE)
defines a generic structure for
users on Blockchain to
interact with each others
besides transfer transactions.
It is worth noting that TIE also
defines how one can
proactively reach other
Blockchain users on-chain
with information and
interaction intent.

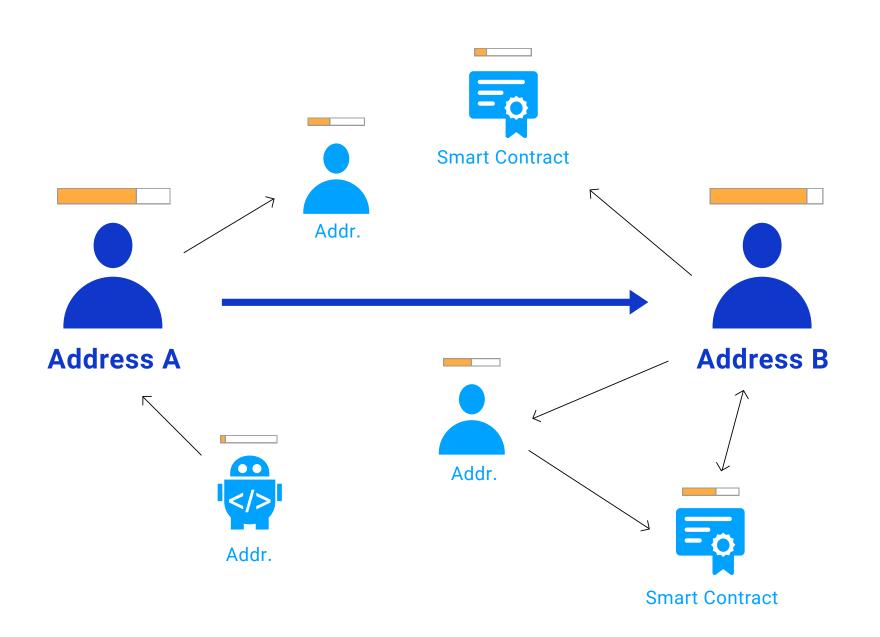
The protocol itself defines:

- Generic interaction structures that could be specialized for different scenarios
- TIE data structure and related storage & transportation guidance
- How to Interpret TIE data in end user facing channels
- Smart Contract interfaces for record TIE interaction data on Blockchain



Protocol: Atlas Targeting Rank





Atlas Targeting Rank (ATR) aims to navigate advertising information in the ever growing Blockchain network and make sure it reaches the most wanted audience.

ATR defines a value ranking mechanism for addresses that is:

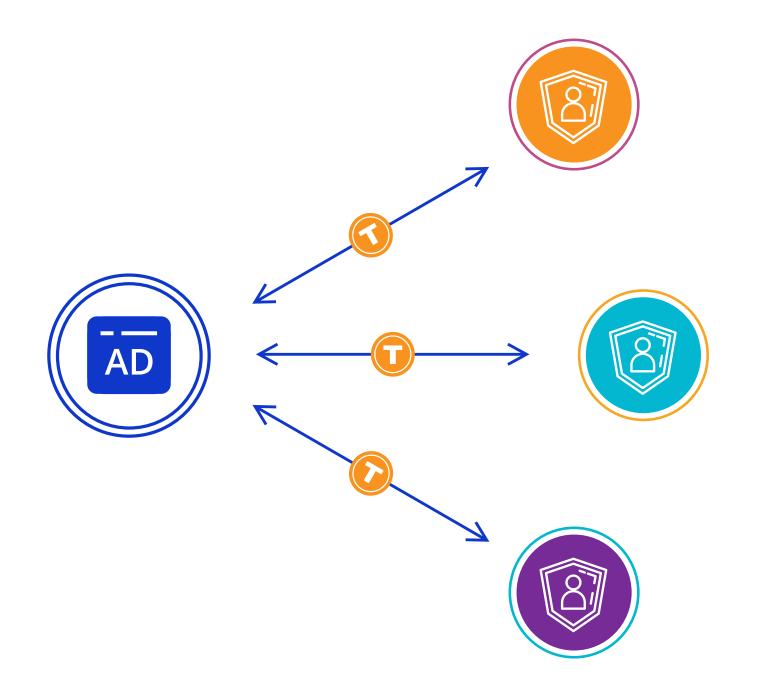
- Based on on-chain activities of addresses
- Specialized for advertising
- Used to increase the overall ROI of on-chain promotions

Every address' ATR value is updated periodically, and relatedness among user and multiple ad candidates are calculated dynamically during ad match.

Protocol: User Data Protection



Atlas Protocol ascertains that user data belongs to user themselves, and value user contributed data through interaction as their contribution to the ecosystem to be rewarded.



Hence in User Data Protection (UDP), the protocol specifies the follow details:

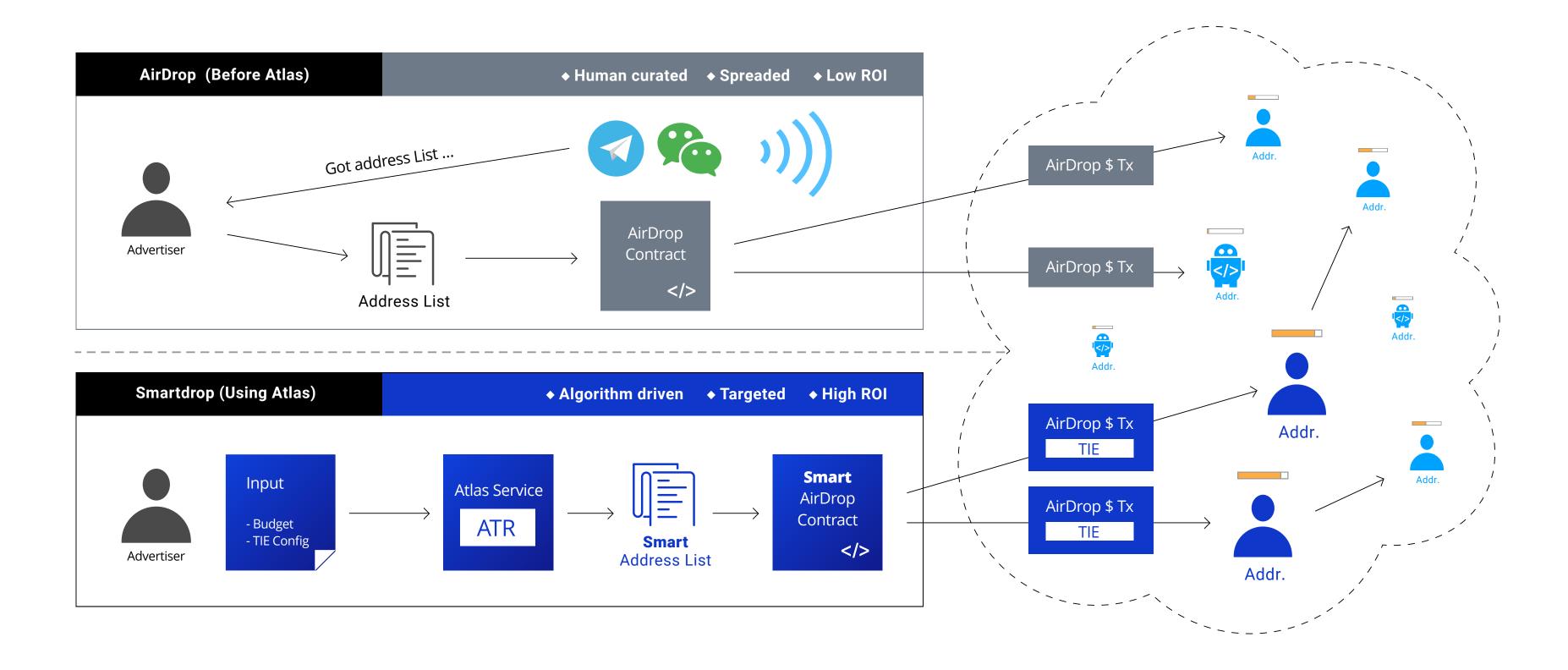
- Ways of using Blockchain technology and other security measures to ensure user data. privacy, including that ATP user profiling will not use risky traditional technologies such as Cookies.
- Mechanism to make sure ATP applications complaint with data protection regulations such as GDPR.
- Guidelines for distributing incentives to user to acknowledge their data contribution.



Use Cases: Atlas Smartdrop

In the era of Blockchain advertising, Airdrop is a new way of promotion that native to Blockchain, however, current solutions all rely on Internet for spreading the word and does not have good targeting hence are costly and inefficient.

With Atlas Smartdrop, one can rely on ATR for selecting targeted audience on-chain base on their need and proactively reach out to on-chain addresses with information, engagement intent as well as token rewards, hence making the whole process highly efficient, yields great ROI.

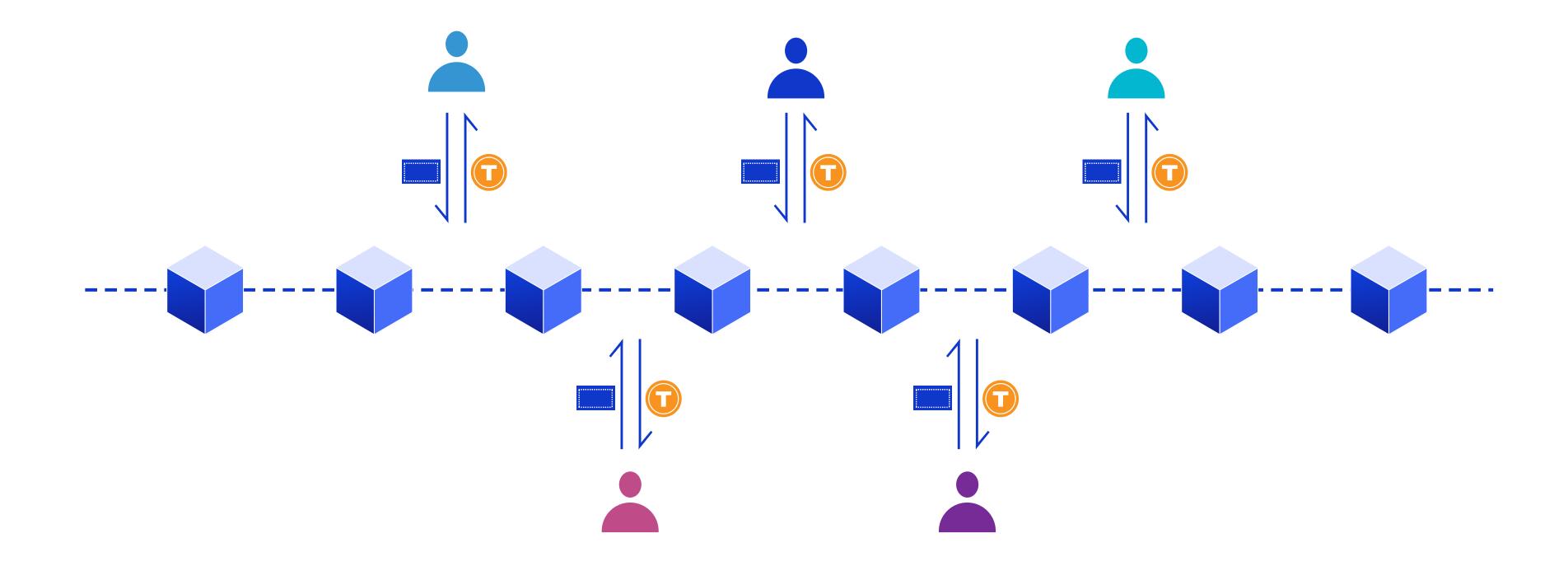




Use Cases: Atlas SmartVoting

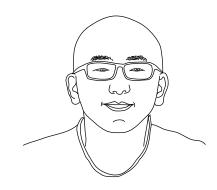
As a third-party technology platform, Atlas Protocol product establishes mutual trust among exchanges, projects and users. Users participate in on-chain voting and get rewards.

Every vote is recorded on blockchain. On-chain data analysis makes it possible to analyze user behaviors and obtain accurate marketing information while straying away from user offline data in order to protect privacy.



Team





Duran LiuCo-founder, Growth

Previously Head of Nebulas Labs.
Former Senior Software Engineer at
Google HQ, leading multiple machine
learning application projects in Google
Play and Cloud Firebase. Former Senior
Software Engineer at FreeWheel,
initiating the first-generation mobile
video advertising product. Former
software engineer in IBM China
Development Lab. Got Master's degree
from Huazhong University of Science
and Technology.



Cheng LiCo-founder, Engineering

Former Senior Software Engineer at Google NYC. Worked on speech recognition/biasing, assistant query understanding and knowledge graph in Google Play. Former Director of Engineering at FreeWheel NYC with 7+ years of experiences in building advertising system for the Internet, running engineering teams in both Beijing and New York. Graduated from Peking University with Master's degree in Computer Science, with focus on information security.

Hitters Xu

Founder of Nebulas. Founder of AntShares (NEO), a blockchain pioneer in China, former Director of Ant Financial's Blockchain Platform (Alibaba's financial arm) and part of Google's Search & Anti-Fraud team. Since 2013, Hitters has founded BitsClub (the very first Blockchain/Bitcoin community in China), ICO365 (one of the largest ICO platforms) and FBG Capital (one of the earliest Crypto funds). Got Bachelor's degree in Computer Science from Tongji University.

Jeremy Zhou

Co-Founder of Jide Technology. Joined Google in 2000 as the 103rd employee. Jeremy was responsible for the development of 60% of the first generation of Google advertising code, wrote Google's first line of Java code, and participated in the development of Stubby, Google Talk and other Google products. Early investor of Lightinthebox (NYSE: LITB). Bachelor from Hong Kong University of Science and Technology, Master from Stanford University.

Ellen Wang

Founder & CEO of Linked-Media. Co-Founder of Soci-Link, group shareholder of Xiamen Providers Online Technology Co. Ltd (NEEQ 831916). Special Invited Expert of Tsinghua Crossover Innovation Research Center (TCIRC). Executive Secretary General of CCPS Media Lab. Over 12 years of experiences in digital media management and operations in Google & Microsoft. Graduated from Yale School of Management and Nanjing University.

Dr. Vilhelm Sjöberg

Co-Founder of CertiK. Vilhelm Sjöberg is an associate research scientist at Yale University. He received his Ph.D. in Computer Science from the University of Pennsylvania in 2015. He is an expert in software verification, programming languages, and type systems. His thesis research focused on making dependent type systems more attractive for general purpose programming languages by making it optional to prove that functions terminate, and by incorporating automatic theorem proving via congruence closure. Currently he is interested in language support for layered verified systems like CertiKOS. Dr. Sjöberg is winner of 2016 ACM SIGPLAN John C. Reynolds Doctoral Dissertation Award.

Pingzhong Tang

Assistant Professor at IIIS, Tsinghua University, completed PhD in CS Hong Kong University of Science and Technology in 2010 and then did his post-doc research on AI, economics and computation and game theory at Carnegie Mellon University. Research focusing on the interdisciplinary topics between AI and Game Theory, as well as its applications in e-Commerce, blockchain and internet advertising. Had multiple collaborations with industry and publications recognized by academic awards.

Advisors

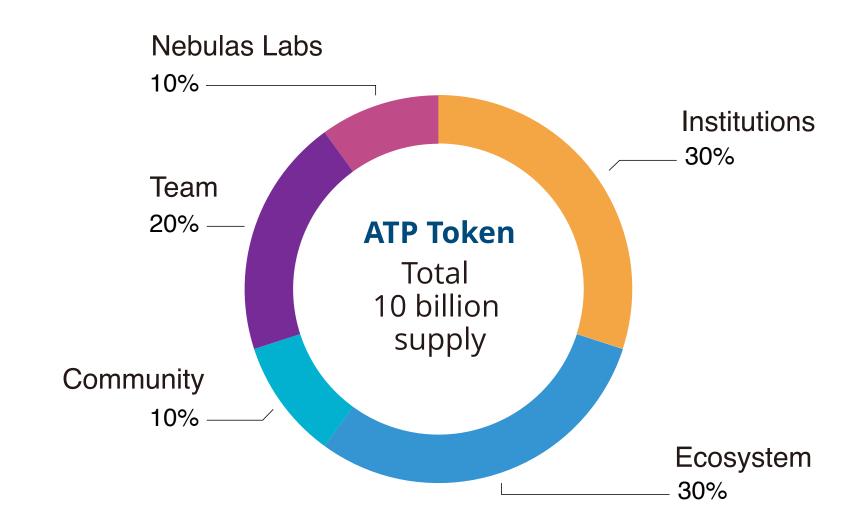
Tokens



Atlas Protocol token symbol is
ATP. It is distributed on
Nebulas public blockchain
platform following the NRC20
standard. ATP token is used to
build technical infrastructure
and boost ecosystem
development for the new onchain interactive advertising. It
can be utilized for but not
limited to these scenarios:

- Ad transaction payments
- Publisher incentives
- User data contribution rewards

The total number of ATP token remains constant at 10 billions. Token allocation distributions and release schedules are:

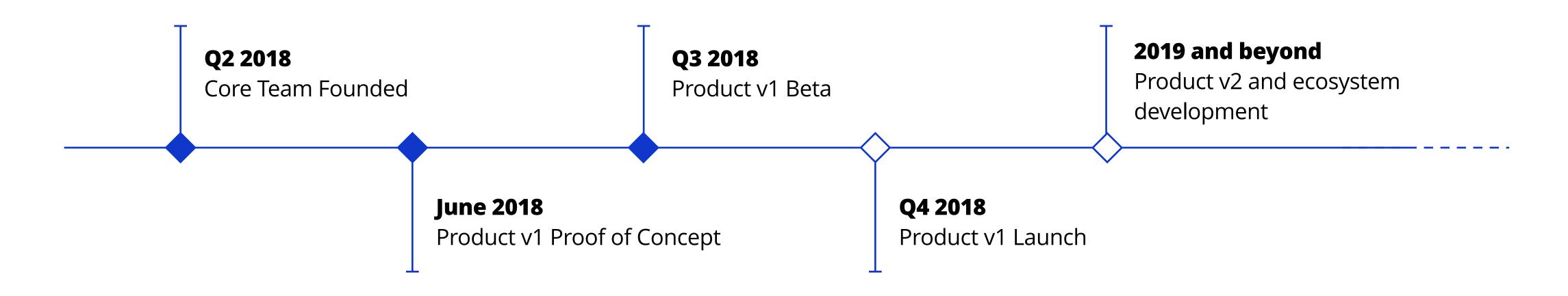


- 30% Institutions, 2 years vesting.
- 20% Team, 4 years vesting.
- 10% Community, for community smartdrop, promotions, and bounty program.
- 30% Ecosystem, for ecosystem business development and advertising system utility purposes.
- 10% Nebulas Labs, for incubation of the project.

Roadmap



- Q2 2018, Core Team Founded
- June 2018, Product v1 Proof of Concept
- Q3 2018, Product v1 Beta
- Q4 2018, Product v1 Launch
- 2019 and beyond, Product v2 and ecosystem development



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