



# FACTSHEET



## Basic Attention Token

Score: 69%

BAT

0.13575 USD

The Basic Attention Token project is a digital advertising platform. The ad revenue is shared between both publishers/content creators and users (if they choose to interact with ads). The BAT ecosystem is embedded into (but not limited to) the browser of its parent company Brave, which acts as a central hub and offers many tailored functions to complement BAT's capabilities.

### FACTS

|                       |                         |                     |              |
|-----------------------|-------------------------|---------------------|--------------|
| Category              | Advertising             | Consensus Algorithm | PoW          |
| Website               | basicattentiontoken.org | Blockchain          | Ethereum     |
| Year founded          | 2017                    | Scalability         | 15 TPS       |
| Market Capitalization | 166,939,507.00 USD      | All Time High       | 0.891962 USD |
| Volume (24h)          | 3,957,046.00 USD        | All Time Low        | 0.071781 USD |
| Volume (30d)          | 51,973,990 USD          | ICO Price           | 0.036 USD    |
| Circulating Supply    | 1,000,000 BAT           | ROI past 30 days    | 7.39%        |
| Total Supply          | 1,500,000 BAT           | ROI past 90 days    | -22.67%      |
| Max Supply            | 1,500,000 BAT           | ROI past year       | -75.45%      |

### CHART

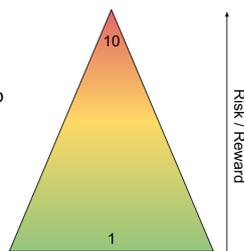


### RISK/REWARD PROFILE

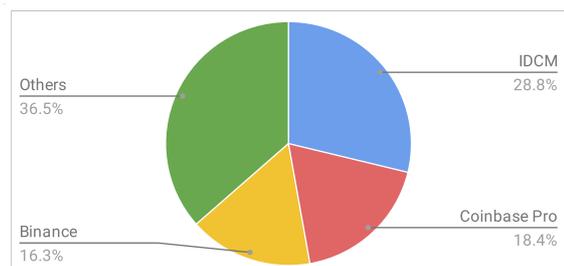
R/R Profile: 6

The risk/reward profile is adjusted to crypto currencies which represent a high risk investment in general.

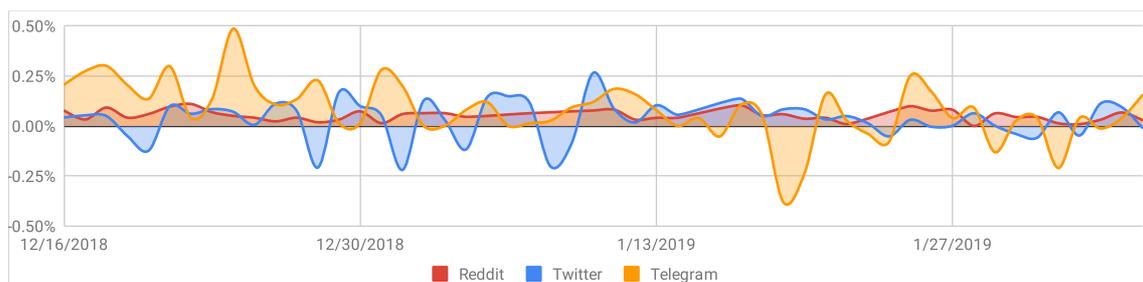
10: higher risk & higher reward  
1: lower risk & lower reward



### TOP EXCHANGES BY VOLUME



### SOCIAL MEDIA & COMMUNITY



# Basic Attention Token (BAT)

As of 5<sup>th</sup> January 2019

## 1. Strategy

69%

### 1.1. Objective

As the name of the project suggests, BAT aims to reshape the advertising business, in part by monetizing user attention. Advertisers are able to purchase ad space via the platform as has been possible conventionally so far with fiat. The paradigm shift comes at the level of users and publishers/content creators. Users earn a small amount of BAT for viewing and interacting with ads, which have been determined as being worthy of display by Brave browser's machine learning algorithms. Publishers will receive BAT through ad revenue paid by the advertisers and/or via user contributions (similar functionality to other membership platforms such as Patreon). BAT seeks to deliver a single platform to bring together all three of the aforementioned parties and therefore streamlining the process of ad generation, viewership and cash flow.

### 1.2. Use Cases

As mentioned above, the project has several use cases:

- a) **Providing a single platform for advertisers and publishers:** BAT provides a system for advertisers and publishers to interact. Advertisers purchase ad space in return for BAT tokens, which are transferred to addresses held by the publishers.
- b) **Rewarding users for their attention:** Brave's algorithms automatically distribute BAT tokens between publishers and users (usually in a 70:30 split) according to a pre-negotiated fee schedule. Users are reimbursed for both ads which they see spread out through regular web content as well as for interacting with dedicated ad tabs, in case they opt-in to this possibility.
- c) **Enabling user funding for content creators:** Similar to the way Patreon and similar websites (see 'Competitors') work, BAT allows content creators and artists to create verified accounts with Brave and receive user contributions in BAT. Approaching this use case with a cryptocurrency seems feasible, since it cuts transaction time (transaction time from user to website, and transaction time from website to content creator) down from days to merely seconds on-chain.

### 1.1. Token

The BAT token is essential for the project as a whole to work. It is the main currency within the ecosystem as well as the primary vessel of value. During the ICO, 1,000,000 of the 1,500,000 tokens were offered for sale, with the remaining 500,000 being reserved for the user growth pool and development purposes. No further tokens will be issued via mining or staking, with transactions being mined on the Ethereum blockchain.

The ad business can certainly benefit from a digital currency which unifies all concerned parties and is capable of instantaneous throughput. Using the Ethereum blockchain seems like a solid choice, however concerns regarding scalability remain, especially since BAT is one of many ERC20 tokens which are in urgent need of high throughput, should they encounter mass adoption of any scale.

## 1.2. Roadmap

According to the BAT Roadmap 1.0, the project is currently in the 'BAT Apollo' phase, which will last until the end of 2018. Major upgrades in this phase include the implementation of ad revenue scaling with user growth, further integration with the Ethereum blockchain as well as integration into more apps and adding support for more platforms and services.

Past milestones already have included big updates (integration of BAT wallet into the Brave browser, adoption of client-side KYC via machine learning and more) and have been rolled out on time. Their website offers a good overview and explanation on the past updates as well as the plans for the rest of 2018. Plans beyond that are non-existent, however, and with less than two months remaining in this year, it is about time to release a roadmap which stretches further into the future.

## 1.3. Market

The global advertising market is expected to reach 558 billion US dollars in 2018 according to forecasts and online ads are guaranteed to gain significance with growing internet adoption and usage. BAT is currently the crypto market leader in this sector and is set to remain at the top for the near to mid future. They are miles ahead of any crypto project which targets the ads sector as well and recently have partnered with the Dow Jones Media group, showing that they are to be taken seriously in conventional business models too.

Especially since the proliferation of ad blockers, advertisers are looking for new ways to reach their target audience - BAT in particular has the potential to help out with this issue.

## 1.4. Competitors

One big conventional competitor to BAT in terms of monetizing attention and user contributions is **Patreon**. Patreon allows artists and creators to register a Patreon account and receive funds from their fans/viewers directly through the website's interface. This can be done in a recurring manner or per work output and is often accompanied by various perks and goodies, which the contributors receive. BAT allows for the same functionality, however, this functionality yet has to be bundled into a comprehensive product, which permits content creators to access all of the functions in an easy to use, accessible manner.

In the crypto space, the closest competitor in terms of market overlap would be **AdEx (ADX)**. The project is also built on the Ethereum blockchain and aims to give users more control over the ads which they receive. However recently, they lost a lot of ground in comparison to BAT. Market cap is at \$16,231,000 as of 31/10/2018, down from \$215,000,000 in January 2018 and marks a clear downward trend for the project.

**Oyster (PRL)** used to market themselves as an alternative to BAT, in offering consented Proof-of-Work scripts. In basic, the user would tick a box which would allow the visited website to run a cryptocurrency mining algorithm on the user's CPU/GPU, and profits to be shared between the content provider and the user according to the Oyster Web Script. However, they've recently had big internal issues including accusations of insider trading, plunging their market cap from \$6,000,000 USD to \$3,000,000 overnight. The repercussions of this shake-up will remain to be seen in the future. In addition to these, BAT faces strong competition from the individual publisher's own ad management services which rely heavily on fiat currencies and metrics based on those. Surpassing these schemes currently in place and convincing established news outlets, opinion, and social media websites to switch to the BAT ecosystem might be the biggest challenge the project is facing.

## 1.5. Innovation

The project's most innovative features are the completely client-side created ad profiles, which guarantee privacy while still admitting the display of targeted ads.

Market wise, BAT was the first project to target the advertising business and widening its scope to attention in general. As of 31/10/2018, it still remains incumbent in this sector, with few projects capable of matching either their human or non-human capital.

Technically speaking, BAT is rather unremarkable in itself. It uses the Ethereum blockchain as a foundation for transactions, with an own smart contract logic implemented on top of that. However, all of this is very well done - especially the native integration into Brave's own browser is very good work from the developers.

## 2. Team & Community 66%

### 2.1. Team/Advisors

**Brendan Eich** is the founder of Brave Software, the developer of BAT, and is responsible for the company's overall vision and strategy. Most notably, he created the JavaScript programming language in 1995, which nowadays forms the backbone of user interaction on the web. Prior to launching the BAT project, he worked at the Mozilla foundation for 11 years, rising through the ranks of Chief Architect and CTO before leaving the company after a 2-month stint as a CEO. He holds a bachelor's degree in Math & Computer Science from Santa Clara University and a Computer Science master's degree from the University of Illinois at Urbana-Champaign.

**Brian Bondy** co-founded Brave Software and is their current CTO. Prior to that, he served as the lead software developer for Khan Academy (2014-2015) and as a Senior Software Engineer at Mozilla (2011-2014). Leading roles included his job at KinetiCD, a cloud backup provider, where he worked as a Technical Director as well as VisionWorks Solutions, which he co-founded in 2004. In addition to his work experience, he was very active on StackOverflow from 2008-2017, proving his expertise in C++ and networking issues, among other topics. He graduated with a bachelor's degree in Computer Science from Waterloo University in 2005.

**Yan Zhu** serves as Brave Software's Chief Security Officer. Previously, she worked at Yahoo as a security engineer and at the Electronic Frontier Foundation (a non-profit digital rights group). In 2015, she was part of Forbes' 30 under 30 list in the area of enterprise technology. She holds a bachelor's degree from MIT in Physics.

**Marshall Rose** is responsible for Ledger & Wallet Systems at Brave Software and has been with the company since 2015. Most notably, he previously worked at the IETF (Internet Engineering Task Force) from 1993-1995 as an Area Director. He graduated from the University of California in Irvine with a PhD in Information & Computer Science in 1984.

Overall, the team makes a solid impression - every individual seems competent in their area of expertise and has accomplished some notable achievements or had high-responsibility jobs in their respective fields. However, one could argue that parts of the team lack experience (or they haven't presented themselves online very well), especially in the cryptocurrency sector; average age sits on the lower end of the spectrum. Nonetheless, every top-tier staff member has stellar references and has contributed a lot to their past ventures.

## 2.2. Partner Organizations

In April 2018, Brave partnered with the Dow Jones Media Group, a publishing and financial information firm with more than 7,000 employees. Their most notable products include the Wall Street Journal, Dow Jones Newswires, and MarketWatch. The partnership encompasses access for Brave browser users to select Dow Jones Media Group products, with 'experimenting on blockchain-based technology in media and advertising' being cited as the priority in a press release.

Other partnerships include:

- DuckDuckGo (verified publisher since October 2017)
- TownSquare Media (verified publisher since May 2018, including endorsement deals)
- Qwant (verified publisher since September 2018 and default search engine for Brave browser)
- YouTube and Twitch both support BAT donations and payments to creators.
- In September, Civic, a cryptocurrency KYC startup, partnered with Brave for verifying publishers on the BAT verified program.

## 2.3. Investors

There are many big and well-known investors that invested in the Basic Attention Token project:

- Founders Fund
- Foundation Capital
- Propel Venture Partners
- Pantera Capital
- DCG
- Danhua Capital
- Huiyin Blockchain Venture

## 2.4. Community

The team is transparent and interacts frequently with the community (e.g. AMAs on their Subreddit, which in itself is very active). Important community announcements are made via the blog section of their website. Other communication channels however are less popular with the community.

## 2.5. Website

Their website features a clean, responsive design and offers a good first step for users who are new to the product. Users are encouraged to sign up for a newsletter and the information given is both crisp and relevant.

## 2.6. Social/Environmental Aspects

BAT rewards users for opting into seeing ads and creates a common platform for users, advertisers and publishers. In tandem with Brave's own browser, it changes the way ads are displayed and rewards users for choosing to see them.

## 2.7. Events

The team around BAT frequently hold Reddit AMAs, with the next one scheduled for 31/08/2018, hosting Jon Sampson, working in Developer Relations at Brave. Past AMAs featured Brendan Eich and Yan Zhu.

Apart from that, there are occasional talks and interviews with members of the team online.

## 3. Technology

74%

### 3.1. Technical Innovation

BAT in itself doesn't really have any technologically outstanding feats - it is an ERC20 token and therefore, shares all of Ethereum's perks as well as its shortcomings. Brave browser, however, which has been developed by the same team which founded BAT uses two machine learning algorithms to enhance the efficiency of the BAT ecosystem. The first, AdGraph, deconstructs a web page into its building blocks and uses its programming to block unwanted ads with 97.7% accuracy. The second is an algorithm which uses a specific method called ELPH in order to get acquainted with user behavior and interaction patterns. Working together with AdGraph, the software then decides which Ads to display and which ones to block. The remarkable thing is that this learning process is done completely locally and is using encrypted files to guarantee privacy. It is this process which allows BAT to become relevant through only displaying a fraction of the available ads and therefore increasing revenue to content creators, publishers and users alike.

### 3.2. Technical Details

BAT as of now is a working product, with several advertisers and publishers (e.g. The Guardian, Washington Post) already having adopted BAT at least in part. No hacks or bugs have been reported so far, however, it should be noted that this responsibility is not entirely up to the developers due to their dependency on the security/continuity of the Ethereum blockchain. BAT's consensus algorithm is Proof of Work, for now, however, it remains to be seen how long this will remain the case with Ethereum's planned shift to Proof of Stake. Currently, a maximum of 15 TPS is supported by the Ethereum blockchain, though this number is likely to increase with future updates to the Ethereum consensus algorithm with the advancing development of Casper/Sharding.

### 3.3. Wallets

Since BAT is an ERC20 token, it can be stored on any ERC20-compatible wallet or device. Brave's browser offers the possibility to store BAT via its interface directly by transacting ETH, BTC or LTC to a given address, with conversion happening automatically in the background.

### 3.4. GitHub Progress

They have two main GitHub repositories, one for native support in C++ and one for client focus, written in JavaScript. Together, both of them count 819 commits, with commits on both branches less than 24 hours old. They make good use of branching and issue tracking and have 12 active contributors to their repos.

## 4. Token Economics

65%

### 4.1. Supply

**Circulating Supply:** 1,000,000,000 (66.7%)  
**Total Supply:** 1,500,000,000 (100%)  
**Max Supply:** 1,500,000,000

**Inflation:** none (300.000.000 BAT reserved for Brave. 200.000.000 in 'user growth pool'.)  
**Deflation:** none

### 4.2. Coin Distribution

#### Coin holdings of the top wallets:

Wallet 1: 22.69%  
Wallet 2: 9.92%  
Wallet 3: 8.13%  
Wallet 4: 5.37%  
Wallet 5: 3.00%  
Other Wallets: 50.89%

### 4.3. Reward Structure

Staking Reward: none  
Mining Reward: none  
Masternode Reward: none  
Profit Sharing: none

### 4.4. Cost Structure

**Transaction Cost:** 0.181 USD (average), 0.61 USD (median)  
**Other Cost:** none

## 5. Conclusion

Total Score: 69%

BAT is a token, which tries to reshape the advertisement industry and the way ads are being displayed and perceived. They plan on doing this by creating a mutual basis for advertisers, content creators and users using their own token which sits on top of the Ethereum blockchain.

The token has three main use cases: Firstly, advertisers can purchase ad space via BAT. Secondly, creators can receive BAT as a token of approval from their viewers. Ultimately, users are rewarded for their attention to ads with a small share of BAT which the advertiser transferred into escrow and which is then split between the publisher and the users. This works natively via Braves (the developers behind BAT) browser, which contains a BAT Wallet and further functionality to make and process transactions.

BAT has been the first project to tackle the realm of advertising and has been hugely successful so far. Potential competitors are far off in terms of market capitalization and infrastructure, and Brave has been able to partner with big companies such as the Dow Jones Media Group.

The biggest question mark about the whole project will be potential future mass adoption, and whether traditional advertising partners will be willing to depart from conventional means of business and turn out to be willing to invest into a cryptocurrency business model.

The staff behind Brave/BAT is among the best in the industry, with Brendan Eich, inventor of the JavaScript programming language and a former top official at Mozilla, at the helm. Other known members include Brian Bondy, Yan Zhu and Marshall Rose, all of which can showcase an impressive record both academically and in terms of prior employment.

The highly active community around BAT on Reddit, Twitter Telegram can help in acquainting oneself with the project, with helpful posts, FAQs and status updates being posted regularly on these platforms.

Technically, BAT has seen its ICO happen via the Ethereum blockchain. While this is helpful for young projects being able to take advantage of pre-existing infrastructure, it also creates a potential bottleneck in scalability and flexibility. Currently, the Ethereum blockchain has a capacity of around 15 TPS and while that is said to increase in the future with the introduction of Casper and Sharding, it is not sure how soon and smoothly this will happen. For potentially global adoption, 15 TPS is insufficient and the team behind BAT are dependent on the Ethereum developments concerning this. Furthermore, while the ICO performed stellar, raising \$15,000,000 in half an hour, token distribution is fairly unequal, with the top five BAT wallets holding just over 49% of the current total tokens in circulation.