



Utilising token economy and blockchain technology to identify each individual website visitor in real-time.

WHITEPAPER

November 2017, v 1.0

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With the help of blockchain technology and its own cryptocurrency BEX, BehaviourExchange will offer everything that Google and Facebook are offering to advertisers around the Globe. And even more. BEX will offer this kind of service to all companies 24/7 for a moderate monthly fee and not only to advertisers when they pay for advertising campaigns.

The Vision

According to Dun & Bradstreet, there are over 235 million companies worldwide. They range from businesses such as online stores and e-commerce, to telcos, insurance companies, banks, pharmaceutical companies, automotive etc. The majority of them are selling products or services to the end consumer (i.e. B2C). They use the Internet as an important sales channel, in the future becoming the primary sales channel for most of them.

There are two major problems for these B2C businesses. First they don't have enough traffic and even more important they don't know who their web visitors are – i.e., what are their characteristics, such as gender, age, income level, purchasing habits, sports, what they are interested in, the food they search for, the problems they have, the emotions they feel and so on (i.e. demographic and psychographic characteristics). This is critical for their success, growth and even survival.

Nowadays they are forced to order expensive advertising campaigns from companies such as Google or Facebook to drive visitors with clearly defined characteristics to their websites. They can drive visitors from different advertising campaigns to different subsites (landing pages). However, they still do not know the characteristics of the visitors coming from other sources that represent the majority of their traffic.

They also cannot proactively engage with their visitors, as they do not know their demographic and psychographic characteristics in real-time. Companies such as telcos, for example, have different offerings for students, businessmen and retirees. Showing a retiree a mobile phone intended for business use or a high data package for students is not efficient. A retiree will have a hard time finding the right offering or even give up. As a consequence, the telco might lose a potential customer.

BehaviourExchange offers a permanent solution to this problem. Businesses will know who their visitors are 24 hours a day, 365 days a year. Furthermore, they will know their visitor's demographic and psychographic characteristics in real-time.

BehaviourExchange is able to understand a web visitor's demographic and psychographic characteristics, as well as their short-term and long-term sentiments. We will offer a 24/7 subscription-based service that will enable businesses to identify their relevant business consumer segments in real-time. They will be able to identify the visitors when they come to their website and engage with them proactively, offering information about the product or service that is the best fit for them personally.

By offering this alternative use of profiles, BehaviourExchange will disrupt established markets and quickly become the preferred alternative for players that identify visitors only through advertising campaigns such as digital ad agencies, Google and Facebook. We will soon become an important global player. Millions of companies using BehaviourExchange services will benefit from it constantly, 24 hours a day, 365 days a year, and not just when they order an expensive advertising campaign.

The decentralized economy has already offered some great and elegant alternatives to centralized business models. There are successful teams currently working on revolutionizing the advertising space. We love what the Basic Attention Token team is doing.

Our focus however is not only on advertising, we aim to revolutionize the way companies are doing business. We will create our own cryptocurrency, the BEX token to leverage the growth of our network and maintain the growth incentives using blockchain technology.

Our aim is to disrupt the profiling space and offer a similar solution to, for example, Google but in real-time, 24 hours a day, 365 days a year. We will leverage blockchain technology to fuel our growth and create a multi-billion dollar business.

Opportunity

The digital advertising market is a massive market with huge opportunities. We see an opportunity in providing businesses with information about their visitors, and doing so in real-time, meaning that every single visitor will see different content, products or services when visiting a certain website. The website operator will tailor the interaction with visitors in a way that will more likely lead to a desired action (e.g. the purchase of a product or service).

By doing so, we are solving some key issues that exist today:

- For the web visitor; they will immediately find more relevant and tailored products and services and not get bombarded with irrelevant content.
- For the business; they can understand the demographic and psychographic characteristics of their buyers/visitors 24 hours a day, 365 days a year.
- For the business; they can know their visitors' demographic and psychographic characteristics in real-time and utilize them to create a positive, targeted, proactive and consequently much more successful interaction with them.

Solution: Combining Blockchain and Big-Data technologies

The first part of the project (Content exchange) is already in place because we have been building a large network of media sites in Europe since 2014 and are connecting over 180 large media websites.

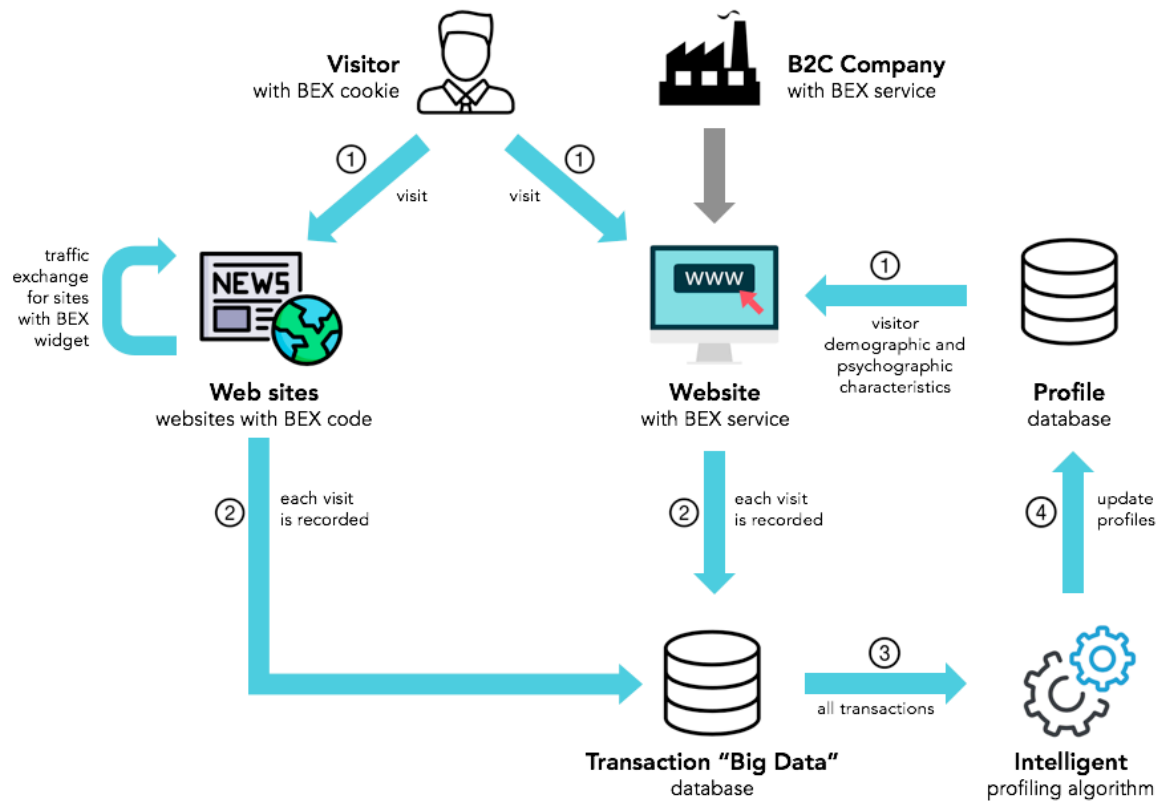
The second part (Behaviour exchange), which is under development, combines Blockchain technology to create a dedicated cryptocurrency, BEX, and Big Data technology to offer the unique behaviour profiling service explained above, which will be on the market by the end of first quarter of 2018.

We are able to closely observe internet visitors habits. We have developed our own proprietary technology that utilizes massive quantities of visitor behaviour information (true Big Data). We run all this information through sophisticated artificial intelligence models to create high-quality user profiles. The models make use of different aspects of the visitors' habits, such as the content they read, visiting frequency, time of day, day of the week, time spent etc. To give just one oversimplified example. Knowing that women are reading about fashion and makeup and men are reading about cars and sports, we can assume the gender of a particular web visitor. The actual prediction models are much more complex and are able to predict hundreds of different characteristics.

We want to leverage blockchain technology and the new BEX token cryptocurrency to expand the websites network and the number of personal profiles much faster. Then we will start offering our service of identifying the visitors' characteristics to millions of companies worldwide.

The BehaviourExchange Platform

The BehaviourExchange platform connects three parties: web visitors, websites and B2C businesses in a smart and unique way. We provide each of the parties with unique benefits: (1) websites are offered the free service of exchanging traffic with other websites from the partner network and are paid for data that helps us profile visitors, (2) the visitors immediately find a product or service that fits their needs and are not bombarded with irrelevant ads and content, and finally (3) B2C businesses understand who their visitors are in real-time and use our service to show every visitor the most appropriate product or service.



Visitors follow different websites such as media and blogs to keep up to date. They also visit the sites of different companies when they are interested in what they have to offer. The websites install our widgets that enable us to track visitors, and they have an add-on option to reciprocally exchange traffic with other websites in the BEX partner network. This traffic exchange enables them to access new visitors outside their regular audience. Widgets also record all visits and visitor reading behaviour to the Transaction "Big Data" database and further to the Intelligent Profiling platform ending in the Personal Profiles database.

A B2C company will install our tracking code on their website, thus enabling the use of the BehaviourExchange service. Once a visitor with a BehaviourExchange cookie visits their website, the service will inform the website in real-time about the visitor's demographic and psychographic characteristics. This will enable the website to display content (e.g. specific products or services), that is most likely a good fit for the profile of the visitor. Each visit to the company's website will also be recorded in the Transaction "Big Data" database.

The intelligent profiling algorithm uses all the information amassed in the Transaction “Big Data” database to create and update visitor profiles in the profile database. BehaviourExchange uses artificial intelligence, text mining, machine learning and statistics, combined with big data analytics to create in depth user profiles. The purely data-oriented approach is combined with practical expert knowledge of the subject matter to uncover personal profiles with relevant characteristics, such as gender, age, income, sports, interests, etc. Similar to the personal profiles Google makes. Profiles are stored in the Profile database.

The added value of the platform is twofold: (1) give businesses constant insight into what kind of visitors visit their websites and (2) provide this information in real-time in order to enable a real-time response. E.g. displaying a product or service best tailored to the current visitor’s demographic profile and current needs. This service will be available to millions of B2C companies around the globe that wish to benefit from real-time profiling.

The Existing Proprietary Big Data Platform

Our platform is already prepared for massive quantities of data. Today, the platform is already able to handle tens of millions of visits per day, and is scalable. It is able to easily scale to hundreds of millions and billions of visits per day, if needed. We have already developed our own proprietary profiling technology. Now we are developing a platform for B2C businesses.

BehaviourExchange has thus far focused on expanding the network of media companies that use their services. So far, the network consists of over 180 media in Europe. The network is now wide enough, both geographically and in terms of variety of content, to reach a large number of visitors, but we are ready to expand globally.

The Market and Competitors

The advertising market is growing annually at 6% and will reach 674\$ billion by 2020, mostly because of huge digital growth. Our service is targeting a portion of those budgets and, in addition, a portion of the wider general marketing budgets.

There is no direct competitor to our project, however the closest can be divided into two broad categories:

1. Big profiling companies that have amassed large quantities of user data and are able to create detailed user profiles. They have a very lucrative business model that focuses on monetizing the user profiles through selling ads. The most recognized competitors in this category are Google, Facebook and Adobe.
2. Big advertising companies, such as the WPP Group, the Omnicom Group, the Publicis Group, the Interpublic Group and Dentsu.

Both of these are using profiles for their core business, which is advertising, and are not able to switch or use both.

Target Customers: B2C Companies

Out of the 235 million companies worldwide, we will primarily target millions of B2C companies. This is a huge market and therefore we will first focus on companies with the following characteristics.

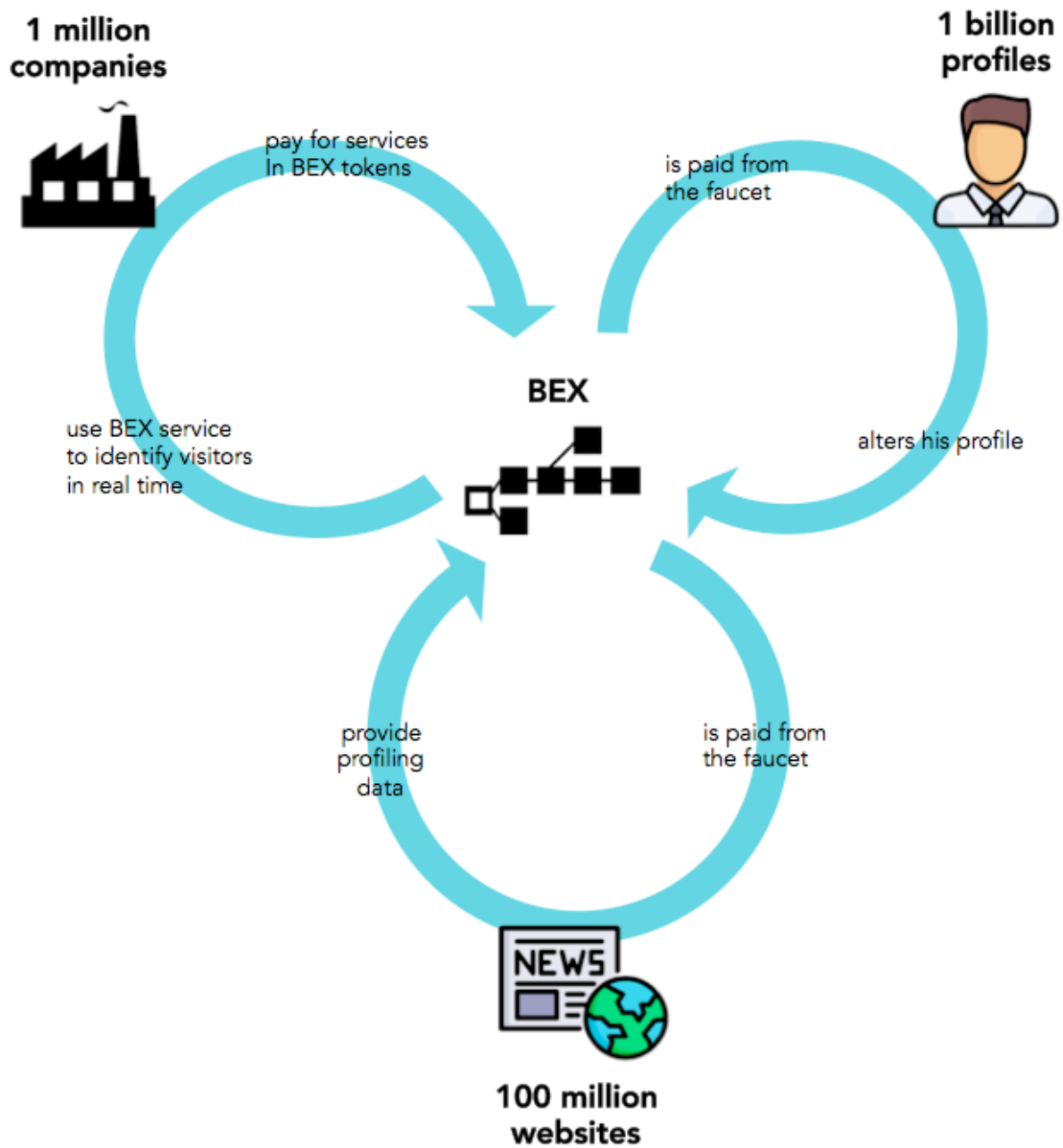
- Geography: We will grow 10 countries a time, prioritizing the countries with the most perspective profile base and website network, as well as market maturity and other factors.
- Market segments: Companies with multiple products that are being sold to different customer segments. They will benefit the most from our platform.
- Size: First we will target mid-sized and large companies around the globe, and later move to smaller segments, i.e. the long tail.

Business Model

BehaviourExchange will offer a subscription-based service to B2C businesses that will enable them to identify their visitors and their personal characteristics in real time. The monthly subscription fee will vary depending on (1) the desired details and (2) the volume of traffic i.e. the number of visitors, (3) the size of the company and (4) the type of industry. The expected price range will be from a few dollars per month for small companies and up to several thousand dollars per month for enterprise-level customers.

The BEX Token Economy

By design, we want to leverage the BEX token to fuel the growth of both (1) the website partner network and (2) the number of active visitor profiles.



Companies

We will incentivize companies to pay for their monthly service in BEX tokens instead of fiat currency by offering them a substantial discount for doing so. This will ensure the constant circulation of BEX tokens from token holders to millions of companies, from millions of companies to us, and then back to the market.

Visitors

We will incentivize visitors to activate their profiles. The token holders that keep at least a predefined number of tokens (i.e. will have a stake¹) will be able to activate their profile. They will do so by registering with one or more social profiles such as Facebook or LinkedIn. Then they'll be able to update and actively manage their profile. In exchange for this, they'll receive a reward from the faucet token pool. They will be motivated to (1) keep a part of the tokens for the longer run, and (2) to identify themselves and actively manage their profiles. This will fuel the growth in the number of active profiles.

Websites

Furthermore, we will also incentivize websites to join the BEX partner network. Each such partner will be able to install our widget and enjoy the benefits of free traffic flow from other websites in the network or just a tracking code. Those sites that will keep some predefined number of tokens² will be rewarded from the faucet token pool, just like the activated accounts of the visitors. Their receiving tokens from the faucet pool will fuel the growth of the partner network.

We record all visits by design. However, every visit by an active account to either a B2C business website or a partner website will be stored in the blockchain. A block producer will execute a series of challenges to the visitor and, if applicable, to the partner site, e.g. daily visit caps etc.. Hashes of batches of eligible visits will be recorded to the Blockchain. In this way, we will not disclose which pages a visitor has visited, or our client base, but will still allow token holders to inspect their transactions.

In an event of an eligible visit, both the active account and the website will be rewarded. Each year, we will evenly distribute 1/3 of the remaining faucet pool. Each day, 1/2 of the amount will be distributed to the eligible token holders and 1/2 to the eligible websites.

The reward for partners and holders of active profiles will be substantial, especially in the beginning. This will ignite the growth of the network, which is a prerequisite for selling the service to B2C businesses.

1

¹ We are considering making a stake limit of 100\$, which is a typical per profile valuation of profiling companies.

2

² Similar to holders of active profiles, websites with say 1,000\$ worth of BEX tokens will be eligible to receive some part of the inflation.

Growth

BEX token economy stakeholders are by design motivated in a way that also fuels the growth of the BEX token price. There will be:

- (1) a constant demand for tokens by B2C companies and at the same time a constant inflow of fiat money into the economy;
- (2) a strong incentive for token holders to keep a part of the tokens for the long term and therefore inhibit supply and;
- (3) a strong incentive for network holders to keep a part of the tokens for the long term and therefore inhibit supply.

Our business growth will be driven by people, while the profile and network growth will be decentralized and driven by the network effect.

ESTIMATED VALUE

Similar companies, such as Google, Facebook and Twitter, are valued at a 50\$ to 350\$ per profile (market cap value relative to the number of profiles). We believe our company will be valued according to the same benchmarks.

Roadmap

2014	Start of development of the first Content Exchange platform
2015, 2016	Expanding the network of the media partners
2017 Q2	The partner network reaches 180+ media companies in Europe.
2017 Sept	Intelligent profiling algorithms deployed
2017 Sept	Number of profiles exceeds 1,000,000 and is still growing
2018 Q1	Crowd sale and distribution of BEX tokens
2018 Q1	Enter the market, with first version of the platform, which will enable use of the tokens
2018 H2	Expansion of the platform

Geographic Expansion Plan

The expansion will be sales-intensive and assumes very aggressive people-driven consultative sales. We will establish worldwide business 10 countries at a time. Each country will have its own sales force. In each of the iterations, we will focus on countries with the strongest profile base and website network, as well as market maturity and other factors.

Legal Challenges

Creating user profiles, storing and accessing personal data is subject to strict personal data protection in the EU and perhaps less strict in the US and other parts of the world.

Since we are involved in the same data analysis efforts as Google, Facebook, Amazon and Adobe, we will study in detail how they comply with personal data protection legislation and not deviate substantially from their model.

Token holders will give the platform an explicit consent to use their data.

The Team, Advisors and Supporters

Core Team

Marijan Jurenc, CEO



<https://www.linkedin.com/in/marijan-jurenc-9a457961/>

Before he was the head and the co-founder of media group Pro Plus, now founder and CEO of BehaviourExchange. Through experience and with his proactive approach he directs us to lead the project towards a common goal. He is a fan of macroeconomics and trends in the fields of media and the Internet, sworn athlete who likes to run, cycle, sail and play golf.

Dr. Štefan Furlan, Director



<https://www.linkedin.com/in/stefanfurlan/>

Stefan has a PhD in computer science. He is passionate about Blockchain and Crypto technologies. He has worked on several projects related to his field during the course of last year, among others Viewly, a decentralised video platform. Before that, he worked at the Laboratory of Data Science at the University of Ljubljana and acted as a CEO and co-founder of a fin tech startup Optilab, that developed a sophisticated artificial intelligence technology for insurance fraud detection.

Peter Kresnik, CSO



<https://www.linkedin.com/in/peter-kresnik-b81a7636/>

Peter started in travel and leisure industry, but was always fascinated with the Internet. He has many years of experience in digital advertising and recently he joined also in project BehaviourExchange. Since then he made a real impact with our advertising network. He is a funky character and a life lover.

Barbara Vtič Vraničar, CFO



<https://www.linkedin.com/in/barbara-vtic-vranicar-23525117/>

Barbara has been working in the field of finance her whole career, with special interest for start-ups, where she actively supported entrepreneurs with education, consulting and financial planning. She is a passionate advocate of CF management and has been cooperating with BehaviourExchange from the start. She loves nature and is a proud owner of a Maine coon cat.

Mitja Doma, CTO



<https://www.linkedin.com/in/mitja-doma-110885136/>

Mitja has followed the rise of the Internet from 1993, first as the Internet program director for the Open Society Institute – Slovenia, later as a freelance programmer and web developer, and in recent years as the software architect and principal developer of the ContentExchange system. He plays a key role also in development of BehaviourExchange and is responsible for function of the system. He loves cooking and gardening.

Lili Cizelj, Business Intelligence Manager



<https://www.linkedin.com/in/lili-cizelj-b961559/>

Lili gained her experience fields of advertising and marketing, working in advertising agencies and international companies. At BehaviorExchange, by diving into data science and transforming reading habits into high quality consumer profiles, her role is to support the sales and marketing departments in finding new ways to attract, maximize and maintain new customers. Her strongest assets are communication and leadership skills, fast thinking and problem solving. She adores exploring new knowledge and pampering the people she loves.

Maša Vozlič, Psychologist for Big Data Profiling



<https://www.linkedin.com/in/maša-vozlič-3b2366150/>

Maša has a Master's degree in Psychology. She is keen in exploring how people think, how their mind works and why they behave as they do. At BehaviourExchange she works as Big-Data Psychologist focusing on profiling website visitors. The biggest challenge about profiling is how to transform enormous and anonymous pile of data into a living and breathing human being and she is the right person to do so. In her quest for answers she always ensures to tie up all loose ends since the meaning of data is to give data the meaning. She is a realistic optimist and is passionate about movies.

Andraž Zupančič, Project Manager – Content Exchange



<https://www.linkedin.com/in/andraž-zupančič-17b59982/>

Andraž gained experiences as administrator and editor for Igrice.si and later as project manager at Hudo.com web portal. He is a manager for Audience Development at ContentExchange for over three years already and now he is also responsible for managing global media sites network at BehaviourExchange project. He was part of the projects from the start which gives him variety of knowledge and possibility of deep understanding He is general sport lover, especially Curling.

Advisors

Uroš Jurglič, Blockchain expert



<https://www.linkedin.com/in/urosjurglic/>

Uros is a seasoned software engineer and a tech enthusiast since early age. He has more than a decade of experience building IT systems in multiple industries including finance, e-commerce and video advertising. He is a Blockchain enthusiast, and works on several blockchain project. He is a core team member of Viewly, a decentralised video platform, and partner in Unchain Technology, a blockchain consultancy. He holds a Bsc in Computer Science and has cofounded Printbox, the biggest print kiosk network in Europe.

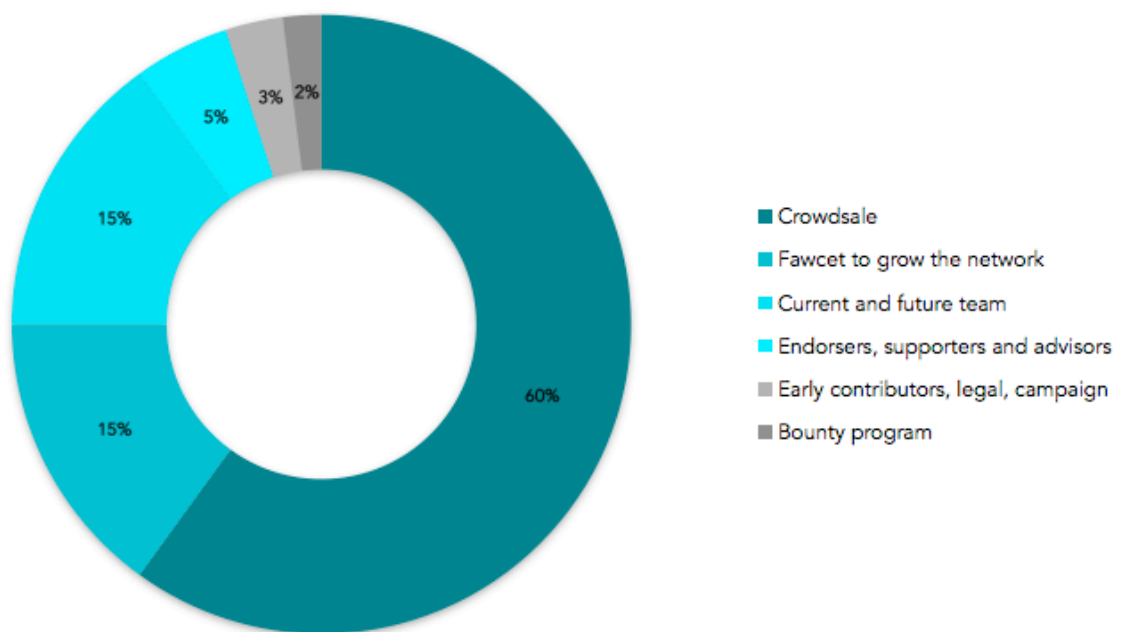
BEX Token Crowd Sales

Contributors contribute voluntarily and their participation cannot in any way be defined or treated as an equity investment into the company that owns the project and intellectual property. Contributors agree with the Terms of Service published on <http://content.exchange>. The ownership of the token does not confer the right to ownership of the company, ownership of Content Exchange intellectual property or profits from the service.

Crowd sales of the BEX token will commence in the first quarter of 2018 and will be controlled by a smart contract.

The BEX token will be ERC20 compliant. All the details regarding the ICO, such as caps, pricing, duration and structure, will be announced 2-4 weeks before the ICO.

BEX Token Distribution



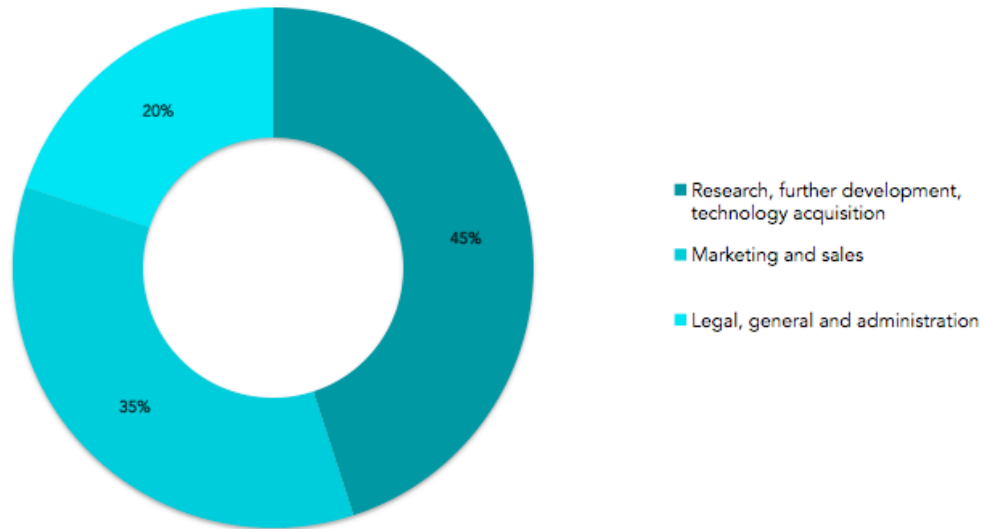
In total 500,000,000 BEX tokens will be created.

- 60% of the tokens will be sold through the crowd-funding campaign to secure funds for entering the market and the future development of the project.
- 15% of the tokens will be used as a faucet to incentivize the growth of the network.
- 15% of the tokens will be awarded to founders, as well as the current and future team.

- 5% of the tokens will be awarded to endorsers, supporters and advisors.
- 3% of the tokens will be awarded to early contributors, legal funds and to cover campaign costs.
- 2% of the tokens will be used as a bounty.

To ensure long-term alignment with our mission, team tokens will be vested linearly over the period of 2 years.

Intended Use of Funds



- 45% of the funds will be used for research, further development and the acquisition of technology.
- 35% of the funds will be used for sales and marketing.
- 20% of the funds will be used for legal, general and administrative purposes.

Failing to raise the maximum amount does not mean the project will not be executed, but will result in slightly restructuring the project time schedule and will mainly influence the speed of growth.