



Pool the power of global crypto miners

White paper

Contents

Abstract	1
1. Project Background	2
Industry Background	2
Mining industry	2
Mining pool introduction	3
Profit model of mining pools	4
2. Platform Introduction	4
About ViaBTC	5
Milestones	5
Business Introduction	6
Industry leadership	7
Revenue data	7
Future growth	8
3. ViaBTC Token (VIAT)	9
ViaBTC Token	9
Distribution & Circulation	9
Incentive model	10
VIAT Value & Application	11
4. Team	12
Core Team	12
Advisors	13
5. Disclaimers and Risks	14
Disclaimers	14
Risks	15

Abstract

Since the birth of Bitcoin in 2009, the skyrocketing price of Bitcoin has attracted more and more people's attention and participation in mining. From CPU mining to GPU mining, and now ASIC mining, the mining industry is constantly evolving. Currently, the entire mining industry is divided into three parts - mining hardware, mining farms and mining pools and the last one is the most essential foundation for cryptocurrency.

Launched on June 5th, 2016, ViaBTC has become the world's leading Bitcoin mining pool with strong technical strength and has launched a number of competitive cryptocurrency pools. In addition, with the release of Wallet, Blockchain Explorer, Mall and other products, ViaBTC has become the world's leading platform of digital mining.

ViaBTC Token (VIAT) is an official value-added services and privileges scheme and it is used as "gas" and value transfer tool. ViaBTC will buy back and "burn" VIAT with 20% of its quarterly revenue at the end of each quarter and VIAT holders are entitled with various privileges on ViaBTC. With its extensive business deployment in the global mining industry chain, ViaBTC plans to explore the financial ecosystem of crypto mining and pool the power of global cryptocurrency miners for a valuable crypto mining community.

1. Project Background

Industry Background

In 2009, Satoshi Nakamoto introduced the concept of Bitcoin, and published the white paper defining Bitcoin as “a peer-to-peer electronic cash system” without the role of any specific currency institutions. Through large number of calculations in certain algorithm, miners confirm and record all transactions in the entire peer-to-peer network composed of many nodes. In the system, Bitcoin has a limited total amount and a block is generated with block rewards at roughly every 10 minutes.

Bitcoin mining, in plain terms, is the use of hardware equipment to solve mathematical problems, so as to confirm network transactions, forming a consensus to ensure the security of the entire Bitcoin network. Thus a certain amount of computing power is needed to solve the mathematical problem and win the bookkeeping rights. As it is difficult to solve the mathematical problem but it is easy to verify the results, the consensus mechanism is also called the POW (Proof of Work). Through providing computing power, miners can get a certain amount of Bitcoins as mining rewards. Mining, a competition for bookkeeping rights, protects the stability of the Bitcoin system at the cost of energy consumed by computing power.

Mining industry

In the early days of Bitcoin, there were only a small number of people involved in mining, so the CPU of personal computer could provide enough computing power to compete for the bookkeeping rights. At that time, people used to mine Bitcoins with their own computers.

With an increasing number of people acknowledging the value of Bitcoin and starting mining, the demand for computing power has significantly improved. Since GPU is a lot more efficient than CPU, mining has later entered the GPU era, followed by the birth of graphics cards mining machine, which was the prototype of the early Bitcoin miners.

The skyrocketing price of Bitcoin has attracted more and more people's attention. Bitcoin mining competition has become more and more intense like an arms race, so the ASIC mining machine that provides much higher computing power emerged. The ASIC mining machine is an integrated circuit designed specifically for mining, with a computational efficiency far exceeding that of GPUs, and henceforth mining has entered the ASIC era.

The Bitcoin mining industry has undergone a continuous evolution, with mining hardware evolving from the early CPU to GPU, then to short-lived FPGAs, and finally to the current professional ASIC miners. At the same time, mining management has also evolved from simple PC operations to professional operations by mining farms. In Bitcoin network where the computing power continues to soar, it is hard for a single device or a small amount of computing power to compete for the block reward, and thus the mining pool has come into being.

Mining pool introduction

The entire mining industry is divided into three parts - miners, mining Farms and mining Pools. The production and sales of miners are in the upper stream of the mining industry. Currently, well-known miners manufacturers are represented by Bitmain. The mining farm is essentially a factory building, equipped with electric and ventilation systems, where there are a large number of miners put together for large-scale mining. As mining farm is a physical gathering place of mining hardware, the mining pool is a virtual gathering place of the miners' computing power.

As one of the most important infrastructure of the entire cryptocurrency industry, the mining pool is specifically an open mining platform. The miners connect their mining machines to the mining pool, who collects the miners' computing power, assigns calculation tasks to the miners, and distributes the rewards according to the miners' workload. The mining pool offers miners different payment settlement methods, each of which is to seek a balance among profit stability, fairness and risks.

Profit model of mining pools

The mining pool obtains revenues by charging mining service fees. However, with different settlement methods, the profit model and potential risks are also varied. ViaBTC mining pool supports three settlement methods: PPS+/PPLNS/SOLO.

PPS+ (Pay Per Share Plus) is an enhancement of the conventional PPS method, with an additional allocation of transaction fees. With PPS+, the pool pays the miners for each valid share they submit – like the pool is hiring them, and therefore miners will enjoy a stable payout. The pool bears all the risks of bad luck and orphaned blocks, hence a higher fee. Transaction fees will be allocated to miners by PPLNS as below.

PPLNS (Pay Per Last N Shares) is calculated by the proportion of miners' hashing power in the pool's total in the last N difficulty rounds when a block is found. Transaction fees will be allocated to miners too. The pool charges a small fee for daily operation and maintenance. With PPLNS, miners' payout is connected to actual blocks mined. Miners may face unstable yields but in the long run, they will enjoy higher payouts.

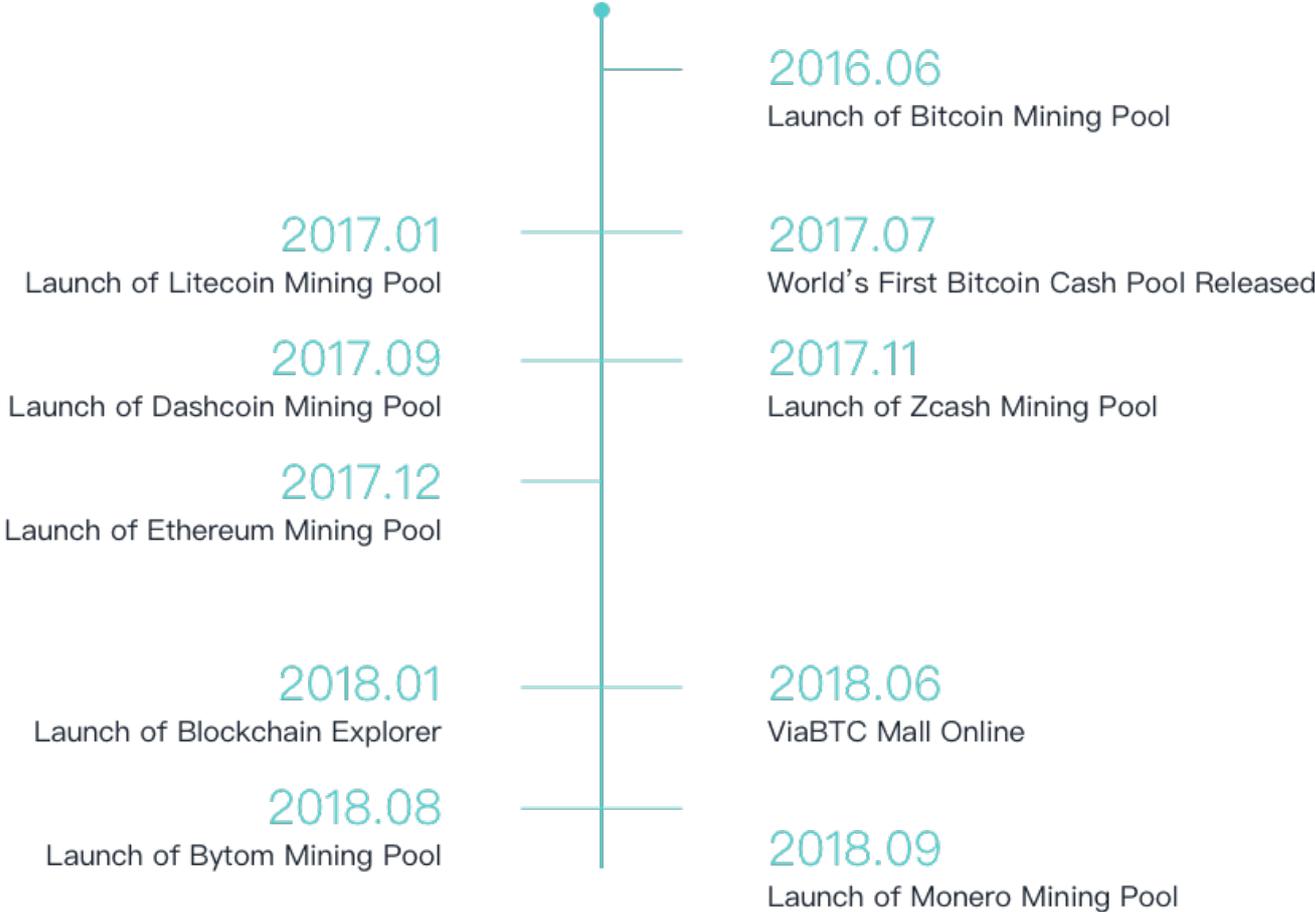
With SOLO method, all block reward will be allocated to the miner who mined the block. The pool charges a small fee for daily operation and maintenance.

2. Platform Introduction

About ViaBTC

Launched on June 5th, 2016, ViaBTC generated its first Bitcoin block at the very first day. With strong technical strength, ViaBTC has become the world's leading Bitcoin mining pool and has launched a number of competitive cryptocurrency pools. In addition, with the release of Wallet, Blockchain Explorer, ViaBTCMalls and other products, ViaBTC has become the world's leading platform of digital mining. ViaBTC means "via Bitcoin", our vision is "pool the power of global crypto miners" to realize our ultimate mission "Via Bitcoin - Making The World A Better Place".

Milestones



Business Introduction



Mining Pool

ViaBTC Pool supports mining 9 types of main crypto coins, including BTC, BCH, LTC, DASH, ETH, ETC, ZEC, BTM, XMR, as well as merged mining of multiple currencies to meet the diverse needs of global users, aiming at providing a stable cryptocurrency mining pool service.

ViaBTC provides users with cross-platform portals including WEB, iOS, Android, HTML5 mobile, allowing users to view mining status anytime, anywhere.

ViaBTC currently supports Chinese (Simplified and Traditional), English, Japanese, Korean and Russian, and will support more languages in the future, laying the foundation of building a global cryptocurrency mining community.

It is ViaBTC's advanced technology, leading-edge and high-performance mining pool system that greatly facilitate the improvement of efficiency, stability and safety of the pool, and guarantee ViaBTC's competitiveness in major indicators such as the orphan block rate and the empty block rate. With strong technical strength and high-performance, ViaBTC is able to pool global cryptocurrency miners.



Wallet

ViaBTC Wallet provides multiple cryptocurrency wallet services with functions of deposit, withdrawal and automatic withdrawal, through a variety of security methods, such as 2FA and the separation of hot wallet and cold wallet, to ensure the safety of users' digital assets.



Mall

ViaBTC Mall is a customer-to-customer trading channel and platform for mining hardware, mining accessories and mining farm resources, offering secured transactions and guarantee services. The Mall has tackled the issue of price chaos in the market through information disclosure and transparent bidding, and thus contributed to a healthy and ecological environment around the mining pool.



Explorer

ViaBTC's self-developed blockchain explorer provides a high-performance service of multi-dimensional data query and statistics to users, including the latest blocks, transaction records, network statistics, network hashrate distribution, market information, etc.

Industry leadership

Since the establish in 2016, ViaBTC's Bitcoin mining pool has been a global leader for a long time and currently accounts for more than 10% market share of Bitcoin hashing power. In addition, the LTC mining pool and DASH mining pool also steadily occupy over 10% market share of the entire network, providing high-quality and stable services as well as considerable revenue for plenty of miners.

Serving the world's professional miners in more than 130 countries around the world, with hundreds of thousands of registered users and tens of thousands of active users, ViaBTC mining pool provides a stable and efficient 24/7 service to its global users.

Through the innovative PPS+ payment model, ViaBTC allocates both block transaction fees and block rewards to the users, greatly enhancing the profits of miners.

In December 2016, ViaBTC launched a free Bitcoin transaction acceleration service, accelerating millions of transactions in total, benefiting a large number of users during the worst time of Bitcoin transaction congestion, which was highly spoken of in the global Bitcoin community.

Revenue data

ViaBTC became profitable shortly after it was launched. At present, our main revenue comes from the service fees of ViaBTC mining pools. ViaBTC mining pools achieved major revenue of 3,000 BTC, 3,500 BCH, 1,200 DASH and 20,000 LTC in the past year.

Future growth

- **Extensive Deployment in the Global Mining Industry Chain**

For a quality channel of the global mining industry of cryptocurrencies, ViaBTC intends to present more quality products in the chain of the digital mining industry, materialize an industry ecosystem for mining related services, and pool the power of global cryptocurrency miners. Plans are in the pipeline to develop more POW pools worth investing in, to provide the miner with more mining options, and to explore POS or new profit models for investors. The blockchain explorer will be further perfected with more coins supported and we'll reach to more industry links with new upstream and downstream services.

- **Exploration of the Digital Mining Finance Ecosystem**

With visionary incentives, ViaBTC will explore financial modeling unique in the digital mining industry. The statistics gathered will be analyzed in depth for the digital asset systems from miners, mining hardware, to mining pools. With the efforts above, an open global digital mining industry ecosystem will be established, diversely, economically, and efficiently fulfilling the needs of miners.

- **Establishment of a Digital Mining Community**

ViaBTC digital mining community will have miners gathered together because of the core competitiveness of ViaBTC pools, actively enhancing the interactions between hardware producers, farm owners, pool managers, developers, investors, and many others working in the mining industry. An globally valued digital mining community will be established by integration of online and offline platforms.

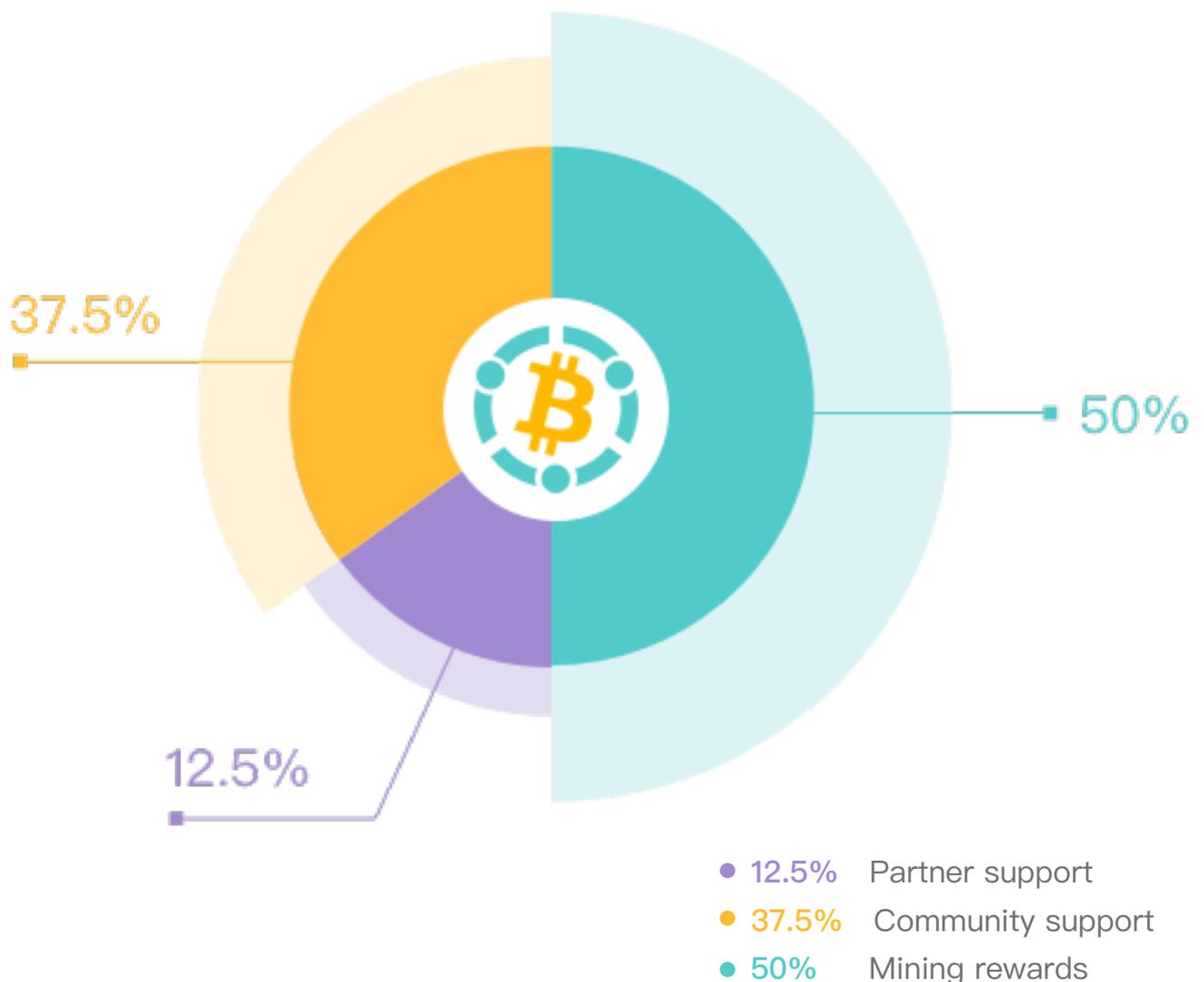
3. ViaBTC Token (VIAT)

ViaBTC Token

ViaBTC Token (VIAT) is an official value-added services and privileges scheme based on ViaBTC mining ecosystem. The token is issued on Wormhole protocol and the total VIAT supply is fixed at 2 billion.

• Distribution & Circulation

- 50% Releases gradually as mining rewards; 1 billion in total
- 37.5% Allocated via community support; releases when tradable
- 12.5% Allocated via partner support; releases when tradable



Incentive model

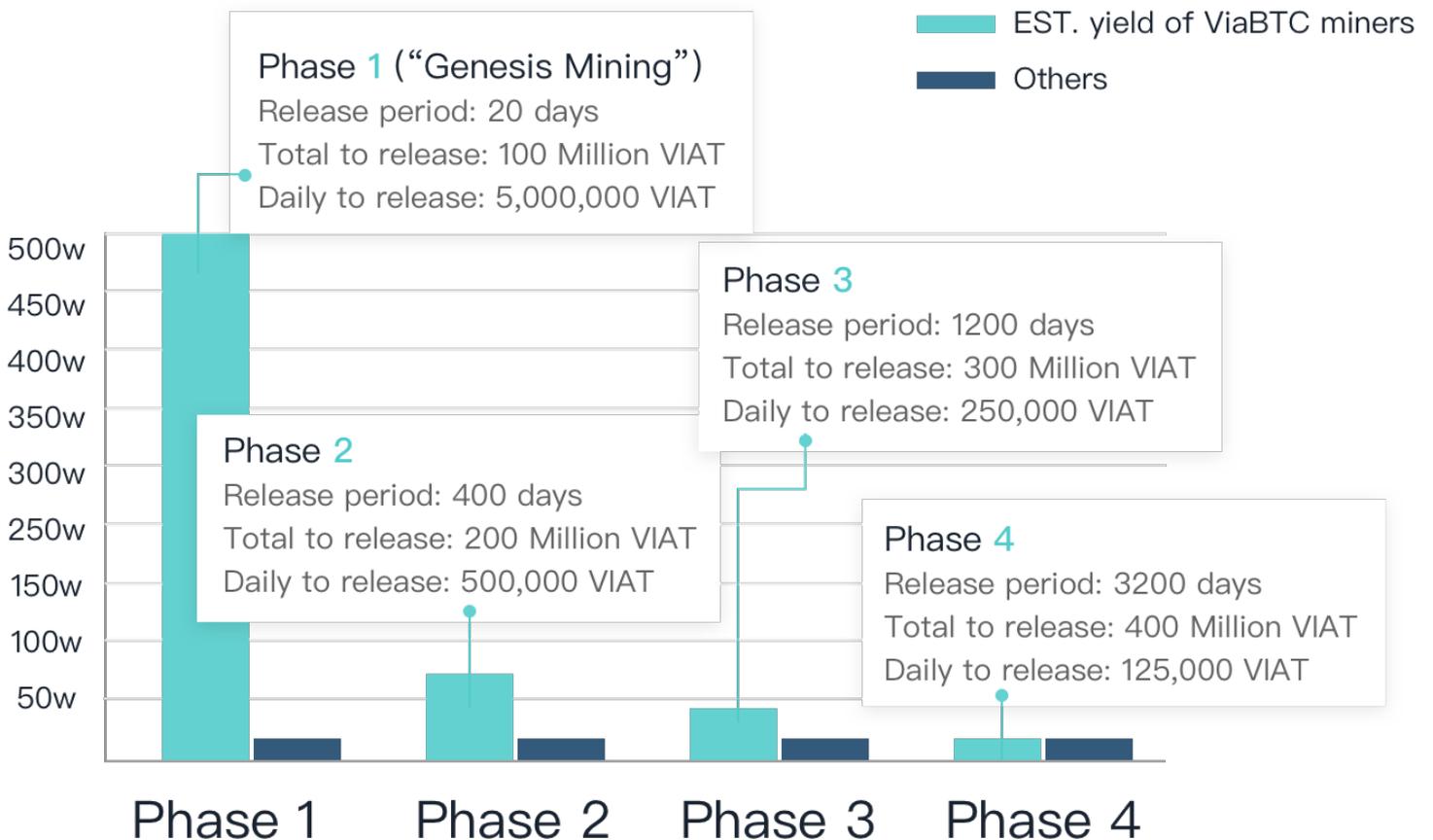
50% of VIAT (1 billion VIAT) will be released and issued via the method of “DUO Mining”.

- **“DUO Mining”**

Aside from the regular mining payouts, ViaBTC miners will also receive extra VIAT via DUO Mining:

VIAT to receive per day = Market value of Miner’s daily mining yields / Market value of the pool’s total daily mining yields * VIAT to release daily

The release cycle is divided into four phases. The release period and total amount to release are as follows. Please refer to the details in the official announcement.



- **Genesis Mining**

During Phase 1 of DUO Mining, a.k.a. Genesis Mining, 100 million VIAT will be released in short 20 days - 5 million on a daily basis, which is 10 times as many as that of Phase 2, to reward the early miners with the best returns.

- **Referral Rewards**

You can invite friends to mine in ViaBTC with your referral link to sign up and win their mining payouts as reward.

VIAT Value & Application

VIAT represents the following exclusive services and privileges in ViaBTC mining ecosystem:

- **Repurchase & Burning**

ViaBTC will buy back and "burn" VIAT with 20% of its quarterly revenue at the end of each quarter. This will reduce the total amount of VIAT steadily on a benign deflation model. The repurchase details will be announced timely and the "burning" transactions are available for checking on the blockchain to ensure transparency.

- **Fee discount**

Users with certain amount of VIAT holdings can have extra privileges, such as fee discount in pool and exclusive customer support.

- **Circulating privileges**

VIAT can be used as payment for Miner purchase, transaction acceleration, ViaBTC souvenirs etc.

- **More privileges**

ViaBTC Token can be used as "gas" and value transfer tool. We will add more application and privileges to it so that its holders can participate in planning of ViaBTC operations, building and improving ViaBTC ecosystem together with the ViaBTC team.

4. Team

Core Team



YANG Haipo – CEO of ViaBTC

Graduated from Northwestern Polytechnical University of China in 2012, majored in mathematics. After graduation, he worked as a developer at Tencent Weibo (China's Twitter) and then FUTU, a Tencent-invested Hong Kong stock exchange. YANG is one of the earliest adopters and investors of Bitcoin and has an in-depth understanding of blockchain technology. YANG began to be involved in Bitcoin in 2013.

Between 2014 and 2015, YANG started his career in cryptocurrency industry and led the R&D team at ZeusMiner, the former TOP 3 Scrypt miner in the world. In April 2016, YANG committed himself to the development of ViaBTC Bitcoin pool and released the initial version after two months of extensive coding effort. That is when ViaBTC was officially launched and when the team started to expand.



OUYANG Huimin – COO of ViaBTC

Got her MA degree at Beijing Foreign Studies University, majored in simultaneous interpretation. She has good knowledge of multiple languages. She used to work at Lakala Payment as CEO assistant and then VP of Operations at ZeusMiner, where she led the operation team and developed from 0 over 100,000 global users, covering 140+ countries/regions. She's an early adopter and believer of cryptocurrency.

Advisors



WU Jihan – CEO of Bitmain

Graduated from Peking University with double majors in economics and psychology, well-known as the pioneer in the fields of cryptographic currency and blockchain technology. His first exposure to Bitcoin was in as early as 2011 when he co-founded 8btc.com with CHANG Jia. Later he went on and founded Bitmain, the world's largest designer of ASIC chips for Bitcoin mining.



Roger Ver Bitcoin.com CEO

Early investor in Bitcoin-related startups including BitPay, Purse and ShapeShift. Now he's the CEO of bitcoin.com

5. Disclaimers and Risks

Disclaimers

- This Whitepaper is for information purposes only. Therefore, none of the contents of this Whitepaper constitutes an investment recommendation, a prospectus or offer document of any sort and is not intended to constitute an offer of securities or a solicitation for investments in securities in any jurisdiction.
- ViaBTC does not warrant or guarantee the accuracy, completeness, reliability or any other aspect of any contents in this Whitepaper. You agree that you have been, are, and will be solely responsible for making your independent appraisal and investigations into the risks of the token.
- You acknowledge and agree that you have considered whether such investment is suitable for you in light of your risk tolerance and financial resources and have sufficient knowledge to make your evaluation of the merits and risks of the project. By participating in the issue plan, you present and warrant that you agree that the nature of the issue of the token is charitable, making your investment non-refundable, irreversible, and the decision is at your own risk.
- ViaBTC Token (VIAT) serves solely as the token on ViaBTC. It should not be considered as a prospectus or offer of any sort and is not intended to constitute an offer of securities or a solicitation for investments in securities in any jurisdiction.

Risks

- Cryptocurrencies are subject to dramatic price fluctuations due to factors such as market expectation and investment intentions.
- Cryptocurrencies see market cycle as other industries do and tend to be influenced by phases of market growth and decline.
- Public attitudes toward cryptocurrencies vary in different countries. The industry is likely to be influenced by local laws and regulations.
- The underlying technology regarding any coin involves potential security risks.
- There are other potential risks in cryptocurrencies to be estimated. You, therefore, should have a comprehensive understanding of the risks before your prudent decisions to invest in them.