



AGATE™

CryptoEconomy 2.0



White Paper

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Abstract

For the majority of cryptocurrency users, everyday transactions are heavily impractical on both the merchants' and buyers' sides. Lengthy transaction settlements^j, high transaction feesⁱⁱ and a lack of user-friendly merchant facilities mean that many cryptocurrencies, although popular, are not used for commonplace purchases.

Agate™ is a new, decentralised blockchain and comprehensive crypto infrastructure for everyday banking and merchant transactions. It boasts the highest transaction speed on the market (instantaneous) with substantially low-cost transaction fees.

As the infrastructure includes a user-facing app, smartbot-AI optimal trading, a merchant-facing app, an API platform, stable coin, plugins, a physical Point of Sale (POS) terminal and debit withdrawal capabilities. Therefore, Agate will be a gateway to connect millions of physical stores, online merchants, users and developers to the cryptoeconomy once established.

In addition, the ecosystem will be fueled by the AGT token, which utilized for several use cases in Agate ecosystem.






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1 Introduction

1.1 What Is Agate™?

Agate is a complete set of a decentralised blockchain, with two mobile apps, an ecosystem, API Suite, plug-ins, add-ons and a physical POS terminal which works as a comprehensive crypto infrastructure for everyday banking and a gateway to connect millions of developers, users, and in-store and online merchants to the cryptoeconomy. It consists of several modules and objects all fuelled by the AGT token that has over ten sustainable utilisation and revenue streams. The important property of Agate is that most of its modules are already built and working or have Beta versions that will be launched soon.

Element	Some Example	
Blockchain		✓ Agate Blockchain
Instant Settlement Blockchain		✓ 1 Sec block time
PoS Mining (Proof of Stake)		✓ Yes
Stable Coin		✓ Agate iFiat Ecosystem
Token Generator		✓ Yes
Ai Powered Wallet		✓ Agate Ai Engine 
Trading Bot		✓ Agate Trading Bot 
Ecommerce Payment Gateway App/Plugin		✓ Agate Payment Apps 
Payment Gateway API		✓ Agate PGAPI
Decentralized Exchange (DEX)		✓ Agate DEX
Merchant PoS (Hardware)		✓ Agate Pos Terminal (Mobile & Desktop)
Merchant App		✓ Agate Merchant App 
White Label Provider		✓ Agate API Suite
Crypto-2-Card		✓ Agate Debit Card

1.2 Problem / Solution

Current solutions around micropayments are either impractical due to slow blockchain settlement or restricted due to limitation of the numbers of coin to be spent. Many solutions have allowed users spend their crypto-currencies; however, it is very hard to convinceⁱⁱⁱ in-store merchants or e-commerce websites to accept those crypto assets or integrate merchant's POS or online payment gateways due to high volatility^{iv} in the market, considering that the bulk of wealth and floating money in the economy are in fiat currencies^v (i.e., USD, EUR, etc.) while many cryptocurrency holders are seeking an easy, cheap way to spend their cryptocurrencies^{vi}.

When we set out to design Agate, we observed a number of core problems with the use of cryptocurrencies that were not yet adequately addressed including:

1.2.1 Cryptoeconomy Problems/Solutions

Total Solution

- ✗ Lack of comprehensive solutions that can support all aspects of a true cryptoeconomy.
- ✓ Agate considers all aspects of a true cryptoeconomy in 12 modules.

Protocol

- ✗ Shortage of white label solutions to allow developers to build their own DApp or DAO on a strong, reliable infrastructure.
- ✓ Agate API Suite will let all users to express their innovation and improve the cryptoeconomy.

Cost

- ✗ Other cryptocurrencies have high transaction^{vii} and exchange fees.
- ✓ By running the whole ecosystem on the Agate blockchain transactions are far cheaper and faster.

Eco-Friendliness

- ✗ Expensive, environmentally unfriendly mining^{viii} method using Proof of Work (PoW).
- ✓ Agate blockchain work with Proof of Stake (PoS) mining, which has the lowest impact on the environment.

Acceptance

- ✗ The number of merchants accepting cryptocurrency compared to the total number of traditional merchants is very low^{ix}.
- ✓ Agate integrates with almost all existing in-store merchants or e-commerce websites globally.

1.2.2 User-Facing Problems/Solutions

Volatility^x

- ✗ Loss of value for users with crypto assets due to poor exchange markets.
- ✓ Enables optimal transfer of your Bitcoin, Ethereum, etc. to iFiat through an automated AI bot, which allows users to get the best spending value for their crypto assets.

Speed

- ✗ Slow transaction speeds, taking from a few minutes to days to settle a transaction.
- ✓ Introduces a new blockchain with near-instant settlement speeds; thus, the practical application of the Agate currency is immense.

Asset Management

- ✗ Managing several different coins and tokens that need different wallets.
- ✓ Users can keep and manage up to 17 different coins and tokens from different blockchains in Agate's multi-currency wallet app (five currently available).

1.2.3 Merchant-Facing Problems / Solutions

Variety

- ✗ Merchants are unsure which currencies to accept.
- ✓ Agate currently accepts five of the most important cryptocurrencies: Bitcoin, Bitcoin Cash, Ethereum, Ripple and Litecoin, and plans to increase the total number of coins to over 17, making it the easiest choice to transact via the Agate platform. Merchants always would receive the exact dollar value.

Supplier

- ✗ Business suppliers may not use cryptocurrency.
- ✓ By allowing transactions back to cash, merchants are assured that they can transfer to fiat money quickly for everyday use in their business.

Settlement

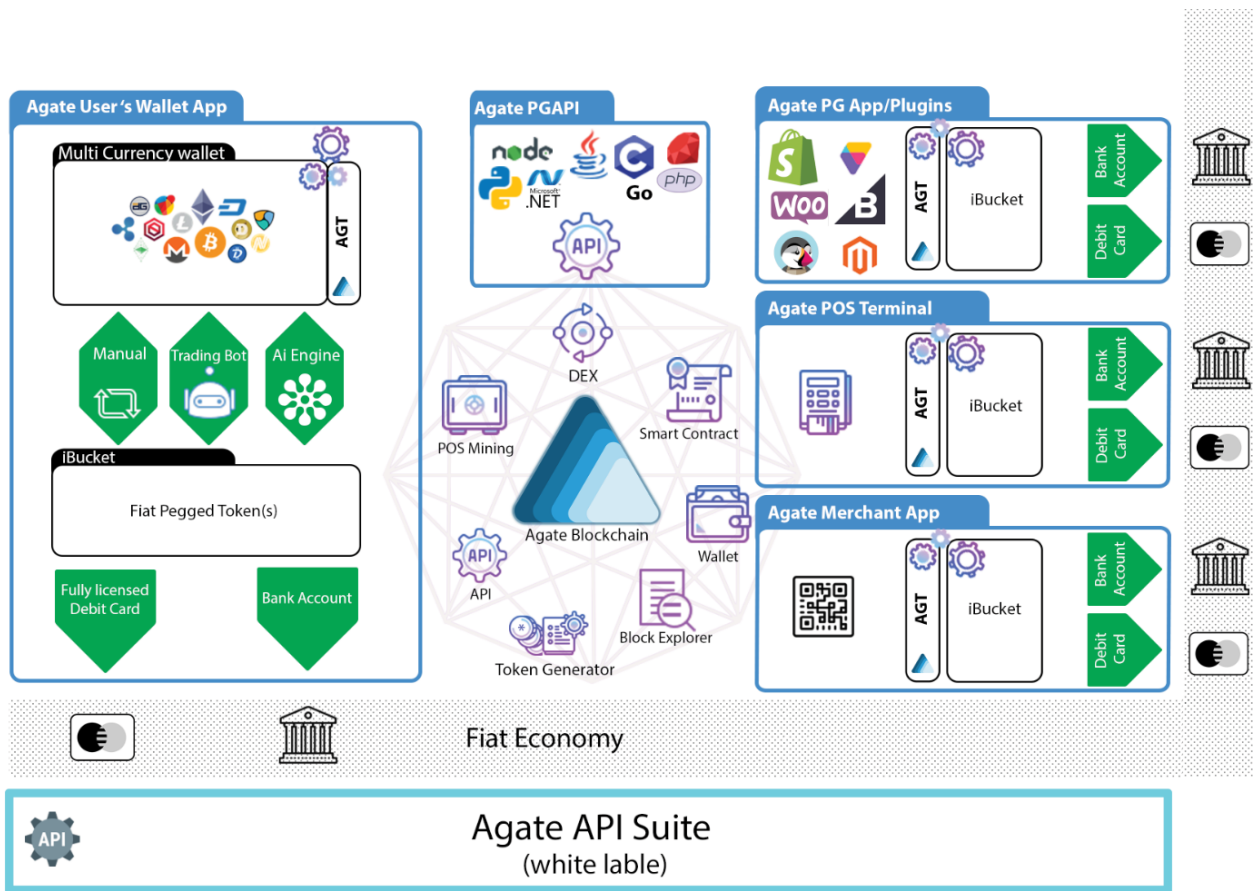
- ✗ Slow transaction settlements; many providers take days to pay the merchants.
- ✓ Through the Agate iFiat Ecosystem, all funds are immediately available and spendable for the merchant.

Agate's sophisticated architecture not only resolves these problems but also allows its end users to keep and manage their crypto assets through a one-stop app by having an AI Engine. While letting anyone develop their own business models on the platform, using Agate API Suite, also provides the most reliable platform for merchants who do not want to risk crypto market fluctuations.

We decided that the only way to solve these problems, unlike in the traditional cryptoeconomy, is a multipronged approach; users need more optimal ways to spend their money, merchants need easier ways to accept funds, and developers and businesses need a comprehensive protocol to develop their own App, DAO, and so on.

1.3 Capabilities

We gathered the most expert team in the payment industry to design a bank grade platform that efficiently serves millions of customers and transactions in the shortest possible time. Our design team, with over 20 years' experience in the payment industry, has also been involved in several Fintech projects, including designing one the most complicated and mission-critical real-time payment platforms in Australia called Osko^{xi} over the New Payment Platform (NPP)^{xii}, which services more than 1,200,000 transactions per day. Now set to design a state-of-art financial ecosystem based on blockchain to globally serve both users and merchants in the most secure, easy and fast way, Agate has several elements which will be described in further detail.



1.4 Functional Overview

1.4.1 User-Facing Functionality

- **Multi-Currency Wallet**

Users are able to keep multiple crypto assets on a single, easy-to-use app.

- **Exchange Cryptocurrency into iFiat**

Users can manually transfer their cryptocurrencies into iFiat, or via suggestions from the Agate AI Engine or with Agate Trading Bot, which will be ready to spend.

- **iBucket (iFiat-Based Transaction)**

Users can transfer their iFiat to a wide range of merchants and experiences with as little as three-second settlement and minimal transaction fees.

- **Spend via Debit Card**

Users can transfer their iFiat to a debit card and spend it instantly.

- **Deposit to Bank Account**

Users can transfer their iFiat into a local bank account in over 25 currencies in more than 50 countries.

1.4.2 Merchant-Facing Functionality

- **Agate Payment Gateway API**

An open-source API will allow all users to develop their own payment gateway on the iFiat Ecosystem.

- **Agate Payment Gateway (PG) App/Plug-Ins**

Free, easy-to-install app/plugin allows ecommerce stores to accept a variety of cryptocurrencies with little fuss. This can integrate with the world's most famous online store platforms like Shopify, WooCommerce, Big Commerce, Magento, and so on.

- **Agate POS Terminal**

Brick-and-mortar stores have access to easy processing of cryptocurrencies without crypto volatility risk as they would receive the dollar value of their goods and services on a physical POS terminal, with no geographical limitation.

- **iFiat-Based Transaction**

Merchants receive payments via iFiat and experience as little as three-second settlement and minimal transaction fees.

- **Spend via Debit Card**

Merchants can transfer their iFiat to a business debit card and spend it instantly.

- **Deposit to Bank Account**

Merchants can also withdraw their iFiats to a local bank account in over 25 currencies in more than 50 countries.

2 Agate Blockchain

2.1 Agate Blockchain Technical Details

"Different horses for different courses!"

~Proverb

With different blockchains designed for different purposes, we aimed to a specific blockchain to meet our criteria and be independent from other existing, multipurpose slow, expensive blockchains. Some of Agate's blockchain capabilities can be summarised as follows:

- **High speed**
 - **Very low transaction fees**
 - **Scalable**
 - **Smart contract**
 - **Decentralised**
 - **Minable**
 - **Secure**
 - **Token generator engine**
 - **Block explorer**
-
- **High Speed**

Agate blockchain's block size and block time are influenced by Ripple^{xiii}, Steem^{xiv} and Waves-NG blockchains^{xv} and use similar principles to have the fastest transaction settlement speed while there is no need for multi confirmation as it runs inside the iFiat Ecosystem. (However, developers can design their app to ask for more than one confirmation.)

Transaction: 1000 TX/s
Key Block: 1 minute 65535 TX
Micro block: 3 seconds 200 TX

Microblock Structure

Generator: PublicKeyAccount
transactionData: Seq[Transaction]
prevResBlockSig: BlockId
totalResBlockSig: BlockId
Signature: ByteStr

totalResBlockSig is the new total signature of a block with all transactions from *blockId=prevResBlockSig* and own *transactionData*. This means that having a liquid block consisting of 1 *KEYBLOCK* and 3 *MICROBLOCK*:

KEYBLOCK() <- *MICRO1(tx1,tx2)* <- *MICRO2(tx3,tx4)* <- *MICRO3(tx5,tx6)*

We have 4 versions of the last block:

<i>ID</i>	<i>Transactions</i>
<i>KEYBLOCK.uniqueId</i>	-
<i>MICRO1.totalResBlockSig</i>	<i>tx1,tx2</i>
<i>MICRO2.totalResBlockSig</i>	<i>tx1,tx2,tx3,tx4</i>
<i>MICRO3.totalResBlockSig</i>	<i>tx1,tx2,tx3,tx4,tx5,tx6</i>

- **Very low transaction fees**

Using our tailored blockchain can greatly reduce transaction costs, making them almost free (a fixed transaction fee of 0.01 AGT exists to protect Agate blockchain from spam attacks). This will ultimately encourage users and merchants to use the whole ecosystem without worrying about transaction fees rather than relying on traditional blockchains with much higher costs, which are not suitable for micropayments.

- **Scalability**

Agate blockchain consists of three microblocks, and one key block which allows thousands of users to have concurrent transactions without delay.

- **Smart contract**


Our development team is working on releasing specific types of smart contracts for Agate blockchain that are aligned with future requirements. Our main focus is to make it very easy without the need for developers to learn a completely new programming language. We anticipate that the smart contracts will be ready for release to the public by Q2 2019.

- **Decentralised**

Agate blockchain will always remain decentralised. We welcome anyone who likes to host and run a full node, after we switch to main net.

- **Mining**

We used an environmentally friendly approach on Agate blockchain mining, unlike the Proof of Work (POW) mining method on Bitcoin and Ethereum, which consumes massive amounts of electricity and requires advanced hardware and knowledge to become a miner. With the



Agate mining network, anyone can be a miner; the only requirement is to purchase 50,000 AGT coins, participate in Proof of Stake (PoS) mining and get rewarded for their participation. Miners also can run their own public mining pool and let other users with less AGT coins lease it to the mining pool and proportionally get rewarded as well; this means users with a minimum of 1 AGT can be miners. During the lease period, users cannot spend their coin, but as there is no contract or cancellation penalty, they can release their coin from the mining pool anytime and spend it immediately.

- **Token Generator Engine**

(We would suggest you study the [Agate iFiat Ecosystem](#) section before reading this part)

One of the fundamental modules in Agate is the token generator engine; in order to issue iFiat tokens (i.e., iUSD, iEUR etc.), we've used the Agate token generator engine, and we created these tokens to facilitate transactions between iBuckets inside the Agate iFiat ecosystem. However, anyone, including individuals, businesses or developers, can create their own customised internal digital currency or tokens, which can be used for anything from running an ICO, buying a gift card, operating a loyalty program or issuing fiat pegged tokens and much more.

Everyone can either use the Agate token generator GUI or Agate API suite in order to generate reissuable or non-reissuable tokens. This has a one-off cost of 50 AGT coins. After the tokens are issued, transaction fees remain at a fixed amount of 0.01 AGT.

- **Block Explorer**

Like other blockchains, Agate blockchain has a detailed block explorer, is publicly available and is currently used to track all transactions within the iFiat ecosystem.

2.2 Multi-Blockchain Architecture



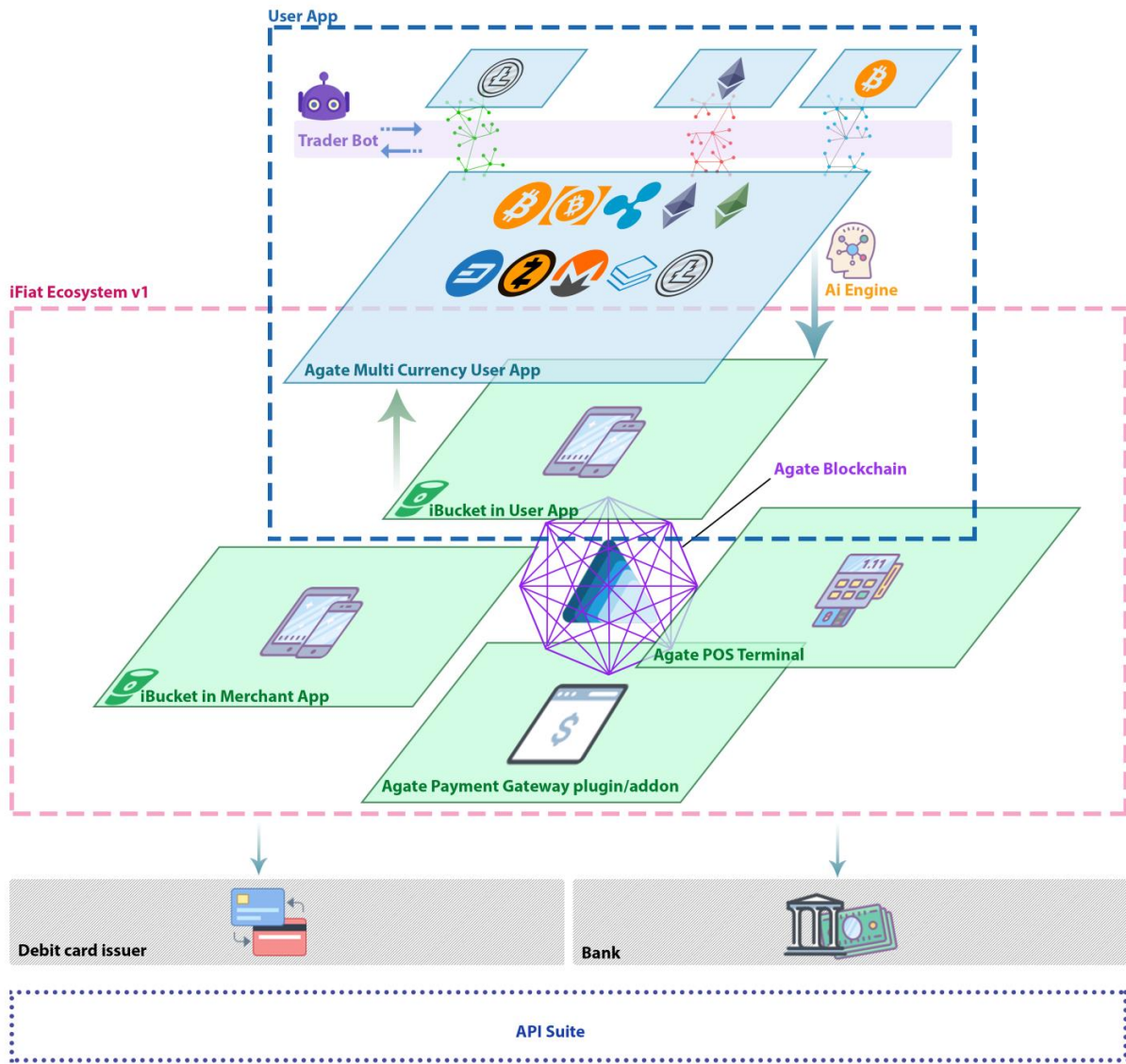
We took the best of everything and put it together to make the most efficient, yet agile and cheap, process in Agate blockchain.

Agate blockchain runs by the Agate coin (AGT), which works as the fuel for most operations, and another token that works on the Agate blockchain and internally to facilitate transactions inside the Agate iFiat ecosystem (please refer to iFiat Ecosystem section for more details).

Because Agate blockchain currently runs on the Test Net, we use ERC20 tokens (which work on the Ethereum blockchain and transact on a Micro Raiden^{xvi} basis). Once we move to the Main Net, we will take a vote from our token holders to decide between the following options:

- a) A coin-swap program running on a smart contract. In this case, token holders can swap their Agate ERC20 tokens with AGT in a one-to-one ratio.
- b) We will send the same amount of AGT to all Agate ERC20 token holders' wallets.

On the other hand, as we mentioned before, users can currently deposit five different coins from different blockchains. In addition, the number of acceptable types of coins will be increased soon. Below we present a high-level overview of how they work together.



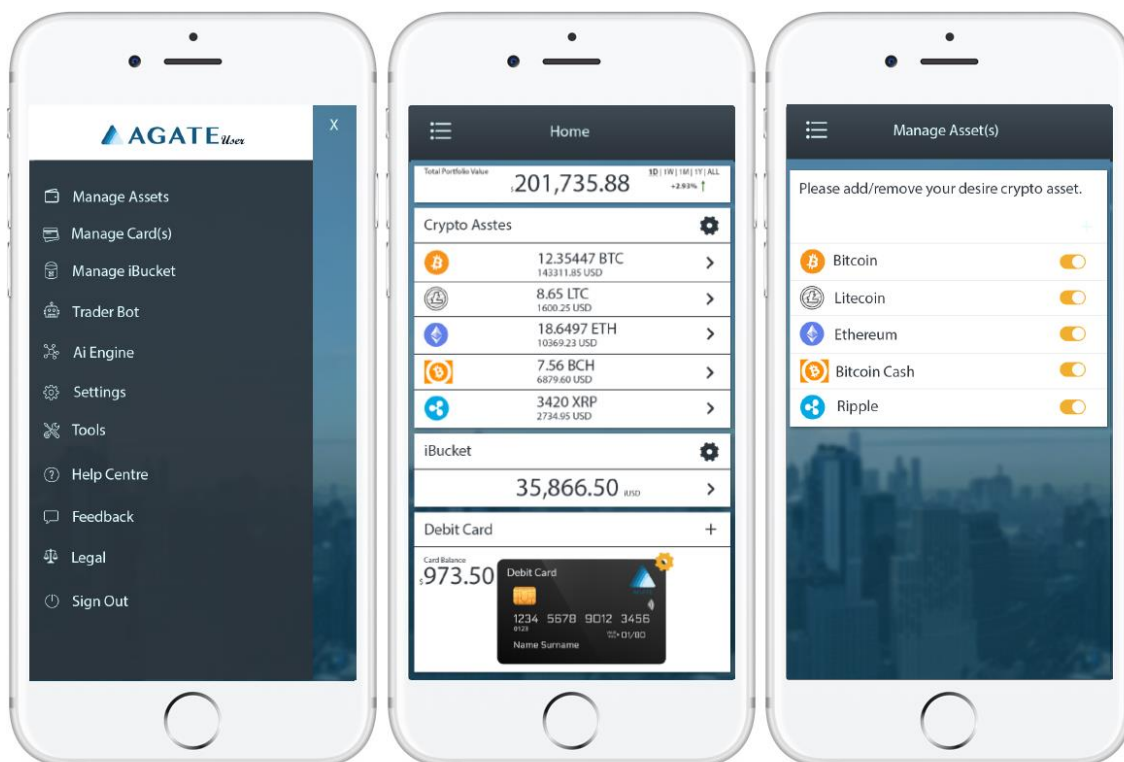
High level architecture

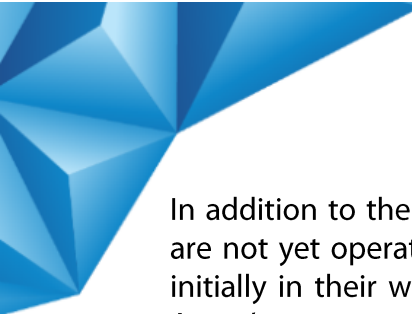
2.3 User's Multi-Currency Wallet App

Bitcoin was introduced to the world as the first cryptocurrency in January 2009^{xvii}. Bitcoin's blockchain settlement was very fast and cheap, but is almost impractical to use now. Therefore, more attractive cryptocurrencies have been created and will be coming in the future. As each cryptocurrency needs to be stored on their own blockchain, it makes it increasingly more difficult for the users to manage their crypto-assets. Another problem is how to spend these assets in the real world.

Recently a few companies have tried to make a basic app to buy back users' cryptocurrencies and deposit fiat currency into their Visa card or Mastercard accounts, but they have all been facing numerous problems listed below:

- 1- From the time users request the conversion of their crypto assets to when they get the actual funds in their account takes a long time.
- 2- There are many fees involved, as their token was not designed to fuel the system and in most cases since their token is a Security Token to get potential profits from company revenue or card issuer cash back.
- 3- Most of them limit their users to depositing one or two cryptocurrencies (mainly Bitcoin and Ethereum).
- 4- When users deposit their coin into the app, it is locked into that app only. In most cases users must either convert the coin to fiat currency in the form of a Visa or Mastercard account or move the coin to another wallet.





In addition to these issues, many of these apps have features that have been promised but are not yet operational and many are operating differently from what they initially claimed initially in their white papers. In Agate we tried to resolve all these issues. For example, in Agate's user app, users can deposit five crypto assets including Bitcoin, Ethereum, Litecoin, Bitcoin Cash, and Ripple. Up to 17 cryptocurrencies are in the development phase and are expected to be released in Q4 2018. Users are able to immediately, and with the best global exchange rate, convert any of their crypto assets to any iFiats (i.e., iUSD, iEUR etc.) in the Agate iFiat Ecosystem (please refer to the Agate iFiat Ecosystem section), which is an internal token/stable-coin that is pegged by a fiat currency. This is one the most important elements of Agate because it lets users and merchants send and receive money almost instantly and for free, or users can choose to deposit the cash in their bank accounts or load their cards and use it in over 30,000,000 stores worldwide^{xviii}. It's very important for us that users receive their funds instantly; hence, in our agreement with our current card provider, we agreed to hold a fair amount of money in their trust account. This allows Agate to load users' cards instantly and update the balance immediately after any financial transaction.

2.4 Agate Trading Bot

The Agate Trading Bot allows users to load multiple assets into Agate to gain the greatest value from their cryptocurrency. In order to improve their portfolio performance, they can simply set as many rules as they want for the trading bot to trade when their conditions are met. The beauty of this solution is that they do not need to transfer their cryptocurrency to different exchanges; they can simply exchange any of their coins to any available wallet in the Agate user app, or, in a highly volatile market, they can save their crypto asset value by setting their coin transfer to iBucket (for more details, please refer to "Why is iBucket important?"). Obviously, like other trading bot users, they would have access to the live price.

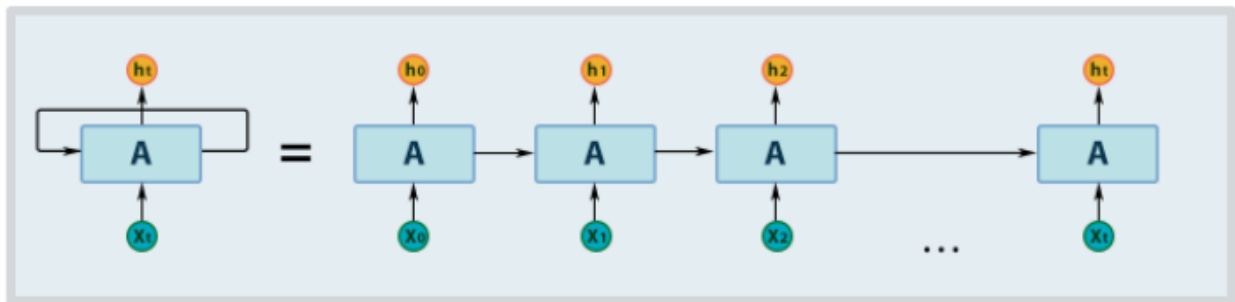
2.5 Agate AI Engine

While the nature of the cryptocurrency market is still fluctuating, the Agate AI Engine uses a machine-learning and decision-making algorithm such as Recurrent Neural Network (RNN)^{xix}, called LSTM, and logistic regression to train itself to advise users when is the best time to transfer their cryptocurrency to iFiats to get the highest possible gain. Agate's AI Engine uses multiple machine-learning methods combined with several sophisticated trading algorithms and market forecasts to have the best possible outcome. Not to mention that for legal and compliance purposes, users will need to confirm the decision to close the deal.

Our AI team was influenced by Andrej Karpathy^{xx}, Tal Perry^{xxi} and Christopher Olah's methodology^{xxii} to create a dimensional database (db) with 4,000 columns and 300 rows, and when we basically vectorise it against the vector, a new vector comes out that has a size of only 300. We've set the numbers in our matrix at random, and part of the "deep learning" is to update those numbers so that our Excel spreadsheet changes. Eventually this matrix spreadsheet will have numbers in it that summarise our original 4,000-dimensional vector

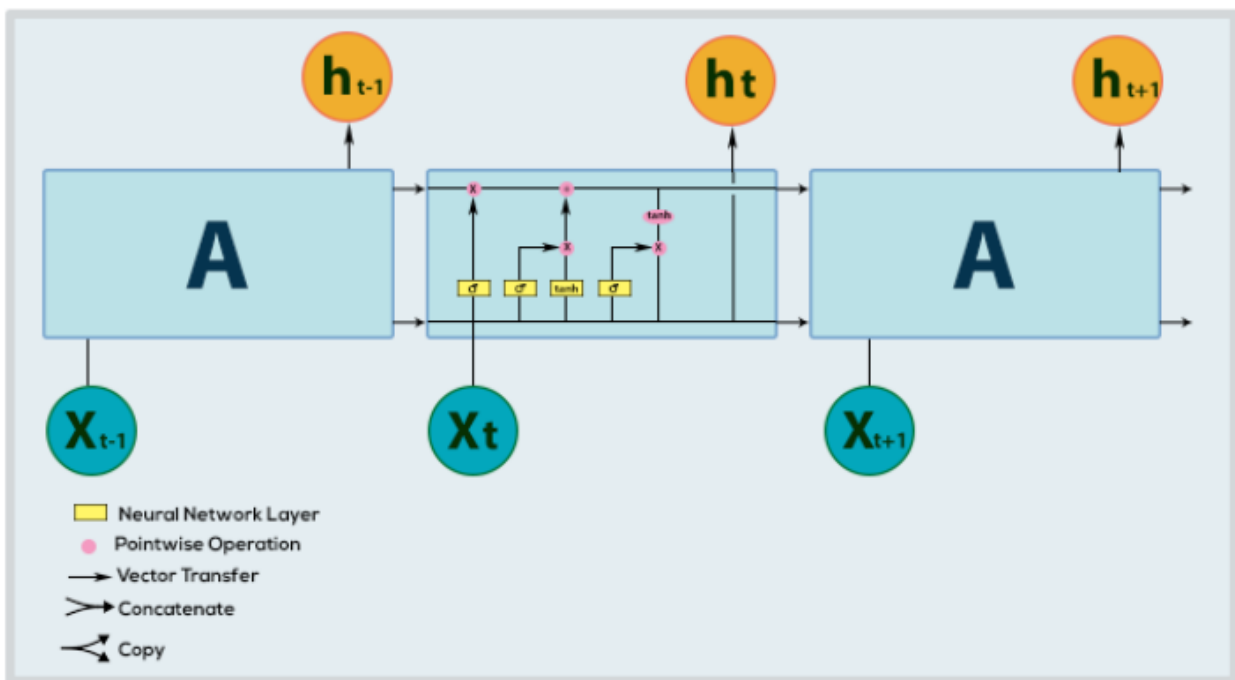
into a concise 300-dimensional summary of itself. We have we have taken a function and applied it to each number in the vector individually so they all end up with values between 0 and 1 (or 0 and infinity; it depends).

RNN is a deep learning algorithm that operates on sequences. At every step, it takes a representation of the next character and operates on the representation with a matrix, as we have seen before. Because RNN has some form of internal memory, it remembers what it saw previously and uses that memory to decide how exactly it should operate on the next input. Using that memory, the RNN can “remember” that it is inside of an intended scope, and that is how we get properly nested output text.



As Olah demonstrated, this version of RNN is called Long Short-Term Memory (LSTM). LSTM has a cleverly designed memory that allows it to:

1. Selectively choose what it remembers
2. Decide to forget
3. Select how much of its memory it should output.

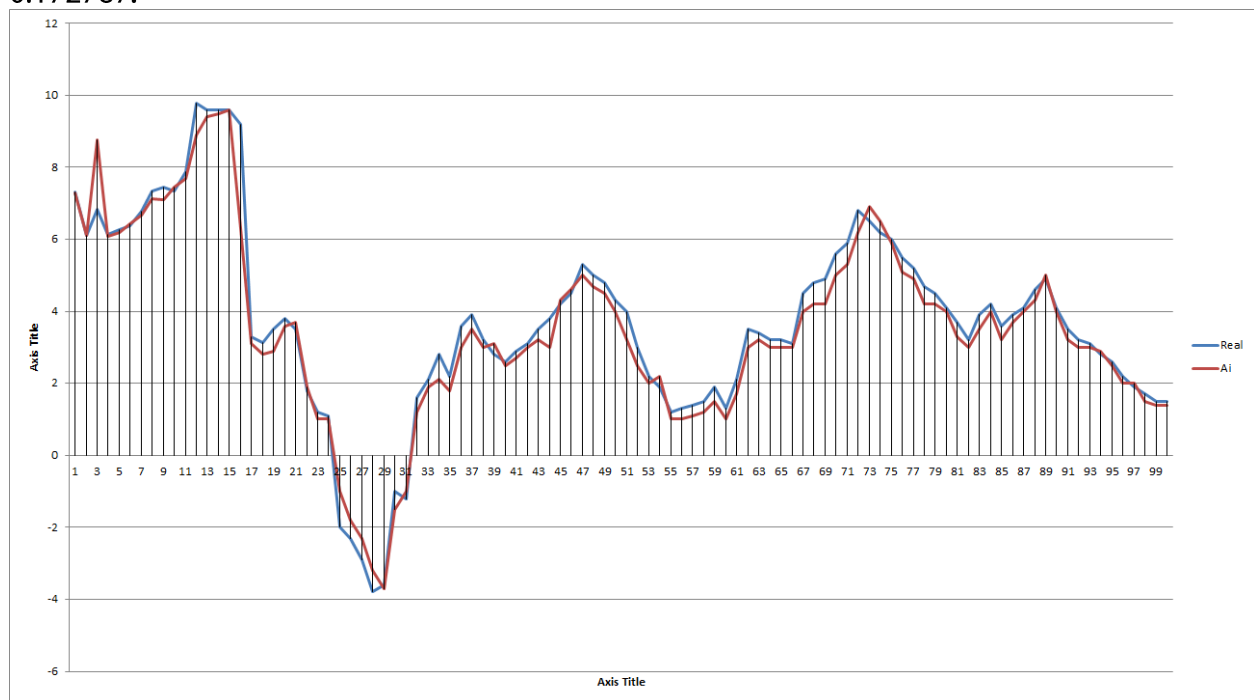


Then, we combined our dimensional db with LSTM and modified the Karpaty code provided below:

```
static void action_new_function(struct s_stat_info *wb)
{
    unsigned long flags;
    int lel_idx_bit = e->edd, *sys & ~((unsigned long) *FIRST_COMPAT);
    buf[0] = 0xFFFFFFFF & (bit << 4);
    min(inc, slist->bytes);
    printk(KERN_WARNING "Memory allocated %02x/%02x, "
        "original MLL instead\n"),
        min(min(multi_run - s->len, max) * num_data_in),
        frame_pos, sz + first_seg);
    div_u64_w(val, inb_p);
    spin_unlock(&disk->queue_lock);
    mutex_unlock(&s->sock->mutex);
    mutex_unlock(&func->mutex);
    return disassemble(info->pending_bh);
}
```

The results in our testing environment, simulating over eight months' trading data of three different coins (Bitcoin, Ethereum and Ripple), showed that out of 200 withdrawals, users using Agate AI Engine could always save between 5.2% and 7.4% more than random fund withdrawals with the same frequency.

We also compared the Agate AI Engine prediction with real data to compare the prediction variance for 100 trades of combined Bitcoin and Ethereum, and we got a variance of 0.172787.



2.6 Agate Debit Card

Although paying in fiat currency is still one of the most common and easiest ways for users to spend their cryptocurrencies, we made an agreement with one of the world's leading card providers so the Agate Debit Card would be accepted in over 30,000,000 stores worldwide. One of the most important value propositions of our card is that a user's request to load the card to settle a balance on the card would only take a few seconds. This is because we have agreed on a balance as a floating credit in our card provider's trust account which will automatically charge it to maintain the same balance in the trust account. This, along with integrating with the card provider's API, will allow Agate applications to instantly load our user's cards with funds.

Due to the strong agreement between Agate and the debit card provider, users with basic KYC (know your customer, which includes full name, address and email) are able to use the card with a low limit. In addition, by verifying their identity and passing Enhanced KYC, they are able to access higher spending limits.

	Basic KYC	Enhanced KYC
POS Single Transaction Limit	\$1,500	\$20,000
POS Daily Spend Limit (20 tr. per day)	\$3,000	\$20,000
ATM Single Withdrawal Limit	\$500	\$600
ATM Daily Withdrawal Limit (5 tr. per day)	\$500	\$3,000
Daily Load Limit (8 tr. per day)	\$1,000	\$6,000
Maximum Card Balance	\$3,000	\$20,000



2.7 Merchant App

Our extensive research on the cryptoeconomy challenge shows us that the main element of slow flow in this economy is not necessarily existing payment methods and tools; but rather lies on the merchant's side. Although, there are several ways for exchanging crypto assets to fiat currency and then spending it in stores or online, there aren't many practical, agile and cheap solutions on the merchant's side. We also understand that although there are currently few solutions that let merchants accept cryptocurrencies, the biggest concerns of merchants are^{xxiii} market fluctuations and high fees. As merchants mainly need to pay their expenses, including suppliers, employees, rent and other expenses in fiat currency, they do not want to accept the risk; even if they get a few more customers who like to spend their crypto assets, one of the other concerns is that having multiple physical POS terminals is not viable for the business: first, it's hard to manage, and second, it's expensive to pay the rental fee, especially as they may not get enough customers to cover the fees, and there is still no dominant company to support these physical devices. Conversely, traditional POS terminals are expensive in rental and fees, and we believe the Agate merchant app and Agate POS terminal to be the ultimate solution for all of these problems. This is because the merchant app works in our Agate iFiat Ecosystem, that runs in Agate blockchain, which is one of the cheapest and fastest blockchains to date. Our fiat pegged tokens, which we call iFiats (i.e., iUSD, iEUR etc.), are floating in this ecosystem such that when users in the Agate user app exchange their crypto assets and transfer them to their iBucket (either by Agate Trading Bot, Agate AI engine or manually), they can instantly spend the funds in the Agate merchant app, and the merchant would receive the funds in less than three seconds, and can handle up to 6,000 transactions in one minute.

Once merchants receive the funds in their own iBucket, they can either order a card and load the fund onto the card or withdraw the money into their local bank accounts or simply spend it any of other Agate Merchant app, POS terminal or online merchants.

The other advantage of this method is that merchants won't bear the crypto market fluctuation risks, as they would receive the exact fiat value in their wallets; also, they don't need to acquire a complicated system to keep track of the market to translate the dollar value to crypto value of users, which means there is no need to have multiple labelling and pricing systems for their goods or services.

While a growing number of merchants worldwide are accepting cryptocurrency as a payment method, it appears that cryptocurrencies are not primarily being used as a medium of exchange for daily purchases. This is due to several factors, including price volatility and the lack of a 'closed loop' cryptocurrency economy, in which people or businesses would get paid in cryptocurrency and then use cryptocurrency as a primary payment method for everyday expenses.



2.8 Mobile and Desktop PoS Terminal

Currently the Agate POS terminal is available in two types, for mobile users and for physical stores, which both come with unique features, including but not limited to the following:

I. **Borderless**

Unlike traditional POS terminal solutions, which are limited to a specific region, Agate POS terminals can be used everywhere in the world without infrastructure limitation! These terminals use the Internet to securely connect to our POS server hosted in the cloud on five continents, and users can use mobile Internet (i.e., 3G/4G) or any other type of common Internet connection (e.g., LAN, WiFi, ADSL) in order to connect their devices to our network.

II. **0% transaction fee**

While currently merchants have to pay between 0.5% and 3% transaction fees^{xxiv} to their bank, financial institute or POS providers, Agate's POS terminal sits on Agate iFiat's Ecosystem, which runs Agate blockchain. This means merchants will not be charged when they receive the funds in their iBucket wallet, and as iBucket is a decentralised wallet, they can spend it anywhere they like—for example, to pay their suppliers or buy items for themselves—or, alternatively, they can request to deposit it to their bank accounts or to load onto their debit cards.

III. **Instant settlement (24 x 7 x 365)**

In legacy POS terminal systems, banks or service providers usually limit their merchants to only perform settlements once or twice in a day^{xxv}. Even after 24 hours of this settlement, they may not access their funds for various reasons—for example, if the merchant's business bank account is different than the POS provider or if they settle after the bank's deadline (usually 10:00 p.m.) or over the weekend. Running transactions on Agate iFiat Ecosystem resolves these issues with real-time settlement, because as soon as a customer pays the funds become available and spendable in the merchant's wallet.

IV. **Secure connection**

This is a decentralised ecosystem, and because there is no middleman to handle transactions, all transactions are performed on the Agate iFiat Ecosystem blockchain with unique and traceable TX ID, which is trackable in Agate block explorer. For other connections (commands, user data, etc.) from a POS terminal to our cloud hosting, we have used a secure method that included hashing all data with a public key and a nonce; then the hashed payload and nonce would be sent to the cloud, and a server would decrypt it by using a private key while the whole process runs on SSL context with valid CA certificate, which is a symmetric 256-bit encryption on X.509 certificates^{xxvi}.

V. No lock-in contract, no exit fee

In order to encourage merchants to use Agate POS terminals and, as a result, to grow the Agate POS network, there won't be any lock-in contracts. They will only need to pay a one-off fee in AGT token to have this service, as shown in the table below, plus a small monthly fee in AGT token for maintaining this infrastructure. Also, merchants can return the terminal as soon as they like without penalty.

Item Specifics	Mobile/handheld POS	Desktop POS
Initial Cost*	1700 AGT	2800 AGT
Monthly Cost*	10 AGT	16 AGT

**Price can be change as per AGT market value, current price is for Feb 2018*

VI. No monthly fee (optional)

Merchants have the choice to own POS terminals by paying a one-off fee to avoid recurring monthly fees; to do so, they can pay from their iBucket wallets or with AGT token.

Item Specifics	Mobile/handheld POS	Desktop POS
Ownership Cost*	3900 AGT	5000 AGT
Monthly Cost*	0 AGT	0 AGT

**Price can be change as per AGT market value, current price is for Feb 2018*

VII. NFC/RFID support

In-store terminals (desktop) can support NFC payments, so instead of showing QR codes, users can use NFC to pay (similar to Visa PayWave^{xxvii} or Mastercard PayPass^{xxviii}).

VIII. Selling virtual goods

In order to incentivise merchants to use the Agate POS terminal, they can also sell virtual goods (e.g., phone charge, iTunes, Google play, Skype credit and similar items) directly on the POS and get commissions for them. As all these transactions would happen on the iFiat Ecosystem using Agate API Suite, these items can be provided by any supplier who is willing to sell their services to Agate users. However, this option

is planned for after the ICO. When the Agate merchant app is updated, this feature would immediately be available on all merchant POS without extra hardware or cost.

IX. Never lose a dollar!

In legacy POS terminals, if for any reason a terminal is damaged either physically, through faults in their applications or because of electronic shock, it's quite possible that merchants may lose their whole day's income if they do not settle on time. In the Agate POS terminal, this is prevented because of its decentralised nature; as soon as users pay, the Agate POS terminal will sign into the iFiat Ecosystem and, as all the funds are logged in Agate blockchain, the merchant can access it from any other device and spend it or cash it out.

Technical Details:

Item	Mobile handheld POS	Desktop POS
Function	Scanner/Printer	NFC/RFID/Scanner/Printer/PSAM
Resolution	203dpi	203dpi
Black Print Speed	75mm/s	80mm
Type	Dot-matrix	Thermal
Internal Memory	4MB	32MB
Network	Wired/Wireless	Wired/Wireless
Display Size	5.5 inch	7" 1024*600/4.3" 480*272



2.9 Payment Gateway Apps and Plug-Ins

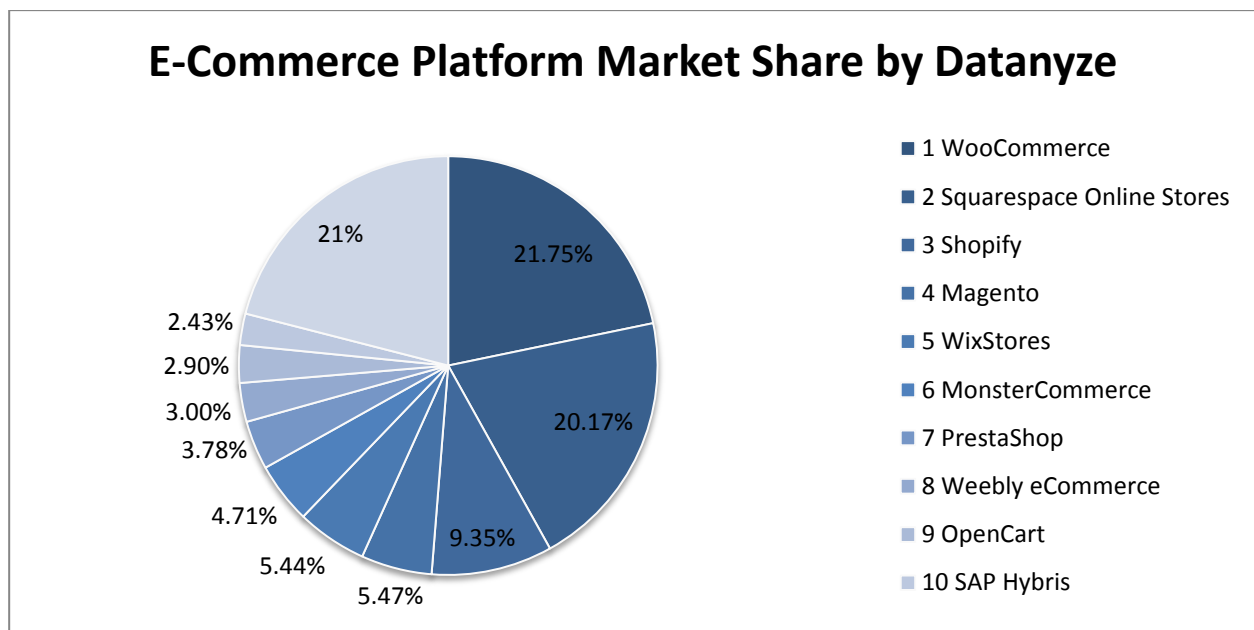
There are millions of online stores on the Internet^{xxix}, but for reasons similar to those of merchants, just a small percentage of these e-commerce websites are willing to accept cryptocurrencies. They generally accept Bitcoin or, in some cases, Ethereum; meanwhile, many others do not want to accept any types of crypto, mainly because:

1. Market fluctuation; they don't want to take the risk.

“*Example: Today a customer is buying a drone for \$5,000 and wants to pay in BTC. Bitcoin's fiat value is \$10,000; the customer will pay 0.5 BTC. Because of crypto market volatility, the next day the value of BTC drops by only 5% to \$9,500, which means the merchant would have the equivalent of \$4,750. Furthermore, the merchant has to pay his supplier in USD or another fiat currency; hence, he needs to either use one of the online services or exchanges to convert it to USD and obviously pay the exchange rate and in some cases withdraw fees, so by the end of the day, the merchant may actually receive \$4,500 which does not make sense for most of case., There might be a case where the value of a crypto asset appreciates, but considering all mentioned costs, still there is risk for the merchant side.*”

2. Volatile price tag; tracking and maintaining the price as many different cryptocurrencies in different exchanges is hard and, in most cases, is impractical.

3. Hard integration; most cryptocurrency gateways are very hard to integrate with traditional online shops, which have been designed to work in the fiat economy.




Agate Gateway API, which is an open-source API and available in GitHub, will let anyone create his or her own payment gateway within the Agate iFiat Ecosystem and run on Agate blockchain. This implies that all online websites can now technically accept cryptocurrency by simply using the Agate Payment Gateway API. For this reason, we have developed a free Shopify app, which allows 500,000 online stores in 175 countries accept cryptocurrency simply by installing a free app that takes minutes to install from the Shopify app store.

Per Shopify statistics^{xxx}, more than 1.2 million people were actively using the Shopify stores by August 2017 gross payments volume (GPV), as payments processed through Shopify Payments grew to \$2.2 billion, which accounted for 38% of GMV processed in the quarter, versus \$1.3 billion, or 38%, for the second quarter of 2016. In order to support Agate Payment Gateway API and Agate in general, we plan to develop the similar plugin and app for the top ten online shopping platforms and release it for free; this includes Woocommerce, Squarespace Online Stores, Shopify, Magento, WixStores, MonsterCommerce, PrestaShop, Weebly eCommerce, OpenCart, SAP Hybris. Through developing these plugins for the top ten online shopping platforms, over 76%^{xxxi} of the total number of online shops on the Internet would have the ability to immediately accept cryptocurrency should they install the plugin.


Cart > Customer information > Shipping method > Payment method





Payment method

All transactions are secure and encrypted.

Agate 

0x54dbb737eac5007103e729e9ab7ce64a6850a310

Total amount:		Payable:
\$262.54 USD		\$262.54 iUSD

PayPal    

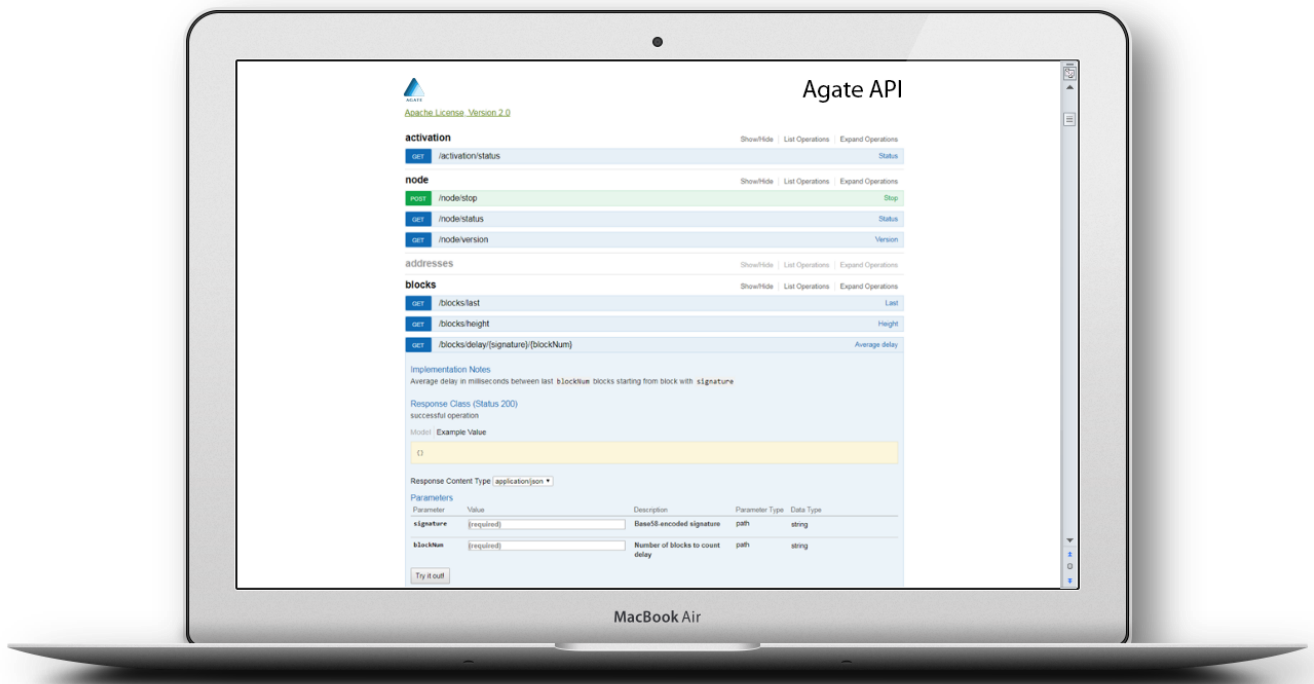
Billing address

Same as shipping address

Use a different billing address

2.10 Agate API Suite

The comprehensive and defined API Suite on REST API standard, which has been secured in multi-function security pattern, has been designed to not only work as another income generation stream for Agate coin and token holders but also to let anyone use Agate as a white-label solution to acquire more customers. Obviously the cost of this API Suite is in AGT. The pricing schedule for the APO Suite involves different API call limits within which customers should deposit a minimum number of AGT tokens for credit. Hence, they should keep depositing as long as they use this system.



3 Agate iFiat Ecosystem

One of the most interesting elements of Agate is the Agate iFiat Ecosystem. It uses decentralised blockchain technology (Agate blockchain) to resolve many of the fundamental issues in the cryptoeconomy, which will facilitate transactions very economically and in real-time.

The blockchain also has its own objects; more details have been described in its section. Fiat-pegged cryptocurrency works like a fiat credit or stable coin and is called "iFiat." All iFiat will initially be issued on Agate blockchain, so they exist as a cryptocurrency token. Each iFiat unit issued into circulation is backed on a one-to-one ratio (i.e., one iFiat iUSD is one US dollar) by the corresponding fiat currency unit.

Agate iFiat has the following advantages over other fiat-pegged cryptocurrencies.

iFiats exist on Agate blockchain rather than on less developed and tested blockchains, not within closed-source software running on centralised, private databases, or on very costly and slow blockchains like bitcoin, which is not viable or practical to use it as a medium to transfer funds or for micropayments.

- However, iFiats can be used just like other cryptocurrencies, i.e., in a p2p, pseudo anonymous, decentralised, cryptographically secure environment, but they are only circulated inside Agate blockchain to facilitate the payments and real-time settlement and secure the value of funds for both users and merchant as iFiat redemption will not face any pricing or liquidity constraints.
- iFiats runs on one of the fastest decentralised blockchain platforms, which includes a decentralised exchange (DEX), Browser base, wallet encryption, open source, multiparty security and reporting functions through which all transactions can be tracked on our blockchain explorer.
- iFiat's one-to-one backing implementation is easier for traditional merchants to understand and accept their goods or services.
- Although iFiats are fully redeemable via the options below, the best use case scenario is to spend it with other merchants or suppliers, because of it's real-time and very small transaction fee for users.
 - Instant loading onto virtual or physical debit cards
 - Request to transfer to bank account
 - Pay any type of bill, include loan repayment, utilities etc.
 - Generate crypto gift voucher, which is redeemable with all Agate merchants (in store or online)

Agate iFiat Ecosystem is capable of supporting many different iFiats; however, it currently runs on iUSD, which is pegged by USD, and each token always represents \$1 USD. In later versions we plan to add EUR, GBP, JPY and AUD.



3.1 Decentralised iBucket

One of the most important objects in the Agate iFiat Ecosystem is iBucket which works as a decentralised wallet and manages iFiat tokens (i.e.: iUSD).

3.2 Why is iBucket Important?

3.2.1 Get the Peak!

This will give users the freedom to exchange their cryptocurrency with fiat currency, not only at the time of actual purchase or when they want to transfer it to debit cards or bank accounts but also when it has the highest value in the market. This can happen either through the Agate AI Engine, Agate Trading Bot or manually upon the user's request.

Example: Let's assume John has 1 BTC and 1 ETH on his multicurrency wallet; and at the moment, 1 BTC value is \$10,000, and 1 ETH value is \$1,000. He wants to transfer \$1,500 to his debit card; he has three options to do this.

- I. As per his preference, he can transfer an equivalent of \$1,500 from a combination of ETH and BTC or only BTC to his iBucket and then load his card.
- II. As per market trends, he knows if he waits a while (for example, another hour) and only exchange his BTC, he will get a better return, so he will activate the Agate AI Engine for 24 hours (or any given time) and close the app, Agate AI Engine as per different machine learning algorithm (which has been described on its own section) keep looking for the best time to exchange one or both of his cryptocurrencies and sends a notification to the user and asks when to authorise the deal.
- III. He can configure the Agate Trading Bot when BTC and ETH price reached to specific value to execute the deal.

Results:

Although results can vary from time to time per market trends, we review two scenarios in bearish and bullish market, as described below.

1. On a Bullish Market:

In the traditional method:

In scenario 1, as the value of BTC or ETH or both are meant to increase; if John (like most of payment app users) only had a chance to exchange his crypto to fiat in the time of expenditure, then obviously he would lose the potential profit of selling it later.

2. Using the Agate iBucket method:

John can see, based on current market trends, that if he waits to transfer his crypto a bit later, he will get more; so he postpones it until the time is right. Also, he can always exchange equal or more than what he needs and transfer to his debit card; to do that, however, he needs \$1,500 to his card, but as it's a good time to do so, let's say he will transfer \$5,000 to his iBucket and then load \$1,500 to his card and keep the rest for other purposes, including direct purchase from any of Agate merchants or online shops or buy other cryptocurrency.

This is the best-case scenario, as Agate AI Engine will notify him of the very best moment to exchange his crypto to fiat.

3. On a Bearish Market:

Although market dumping is not the best time to exchange one cryptocurrency to other, because they more or less decline together, a user can instantly exchange crypto assets to any iFiat token that has the highest value for him or her (e.g., iUSD) to have a minimum loss on his or her portfolio; this can be done manually, as per user's preference, or with Agate Trading Bot to place a "stop loss order." Then, as the fiat value of the crypto asset doesn't force the user to transfer it to his or her bank account or debit card or spend it in a store, he or she can keep the funds in iBucket and spend it at his or her leisure or buy back any crypto asset when it decreases in value. Thus the user can somehow gain from an *internal arbitrage*!



Internal arbitrage example:

1 BTC is \$10,000, and we are in a bear market. A user immediately exchanges his 1 BTC to \$10,000 iUSD and keeps it in his iBucket; then, after a while, BTC value decreases to \$9,000, so from his iBucket balance, the user can buy 1 BTC and get \$1,000 profit, or he can buy 1.11 BTC, which means he gained 0.11 BTC in a few hours instead of losing \$1,000 value of his previous portfolio.



3.2.2 Spend Everywhere

For anyone with any type of cryptocurrency, it is important to have freedom to spend it anywhere, in store or online. They can spend their crypto value via Agate iFiat Ecosystem; iBucket can be considered a decentralised wallet for iFiat tokens, and because Agate doesn't charge merchants to receive iFiat token in their iBucket, they are more than happy to get their funds via this system instantly—and, more importantly, for free and without accepting the crypto market fluctuation risk. This is something that has never existed on the merchant side to date.

3.2.3 Get Refund!

In real life a customer may need to get a refund for various reasons, including local government regulations^{xxvii} to protect consumer rights or in the case of faulty merchandise. In the current fiat economy, it's expensive for merchants, and the cryptoeconomy has transfer/send fees on both sides! Conversely, in Agate iFiat Ecosystem, an internal funds transfer is very cheap (always 0.01 AGT), so clients can get almost all of their expenditures back on their iBucket.

3.2.4 Dispute

As all iBucket transfer happens on blockchain, there won't be any dispute for transaction settlements between sender and receiver, because they both can track the transaction on public blockchain explorer.

4 Agate ICO

4.1 Business Model and Revenue

While all described futures and options of Agate look promising for end users and merchants who are using this software suite, this section has been drafted for token holders to highlight the value proposition of the AGT token and to evaluate its huge potential for growth.

In fact, AGT is the fuel for the whole ecosystem, and it has real value from day one. For example, users can order their debit cards, POS terminals and accessories with their fiat money or equivalent of AGT tokens as per market rate.

While AGT has a fixed number of tokens *forever** (refer to our smart contract stored in GitHub), as the number of users and transactions increase, the demand of acquiring AGT token would grow; therefore, its value would surge.

4.2 AGT Token Value Propositions

Unlike most newly generated tokens of ICOs in blockchain apps or software with no or only one income stream, one of the value propositions of the AGT token is that it has several revenue streams to ensure our token holders have a solid, continuous value-added token. While we always work to add as many as possible new strong income streams for AGT token, here are some examples for the current Agate token:

1. All exchange orders between different cryptocurrencies have a fixed cost of 1.00 AGT
2. Any trades by Agate Trade Bot at the time of execution would cost 1.00 AGT
3. Although exchanging cryptocurrency to any iFiat token is free, if users want to load their cards or request bank transfers, Agate will charge them an equivalent of 1% of the transferred order in AGT token.

“*Example: Tim wants to transfer \$500 worth of BTC to his card. He exchanged 1 BTC on the best exchange rate (1 BTC = 10,000 iUSD), and his iBucket would charge iUSD 500 (no additional exchange or transfer fee) in the next step; he wants to load \$500 to his card.*

As 1 AGT ~ \$0.079 and 1% of \$500 is \$5, he needs 63.291139 AGT to authorise this order; so let's say the value of AGT token increases by 10X, and each token is worth \$0.79; to do so, he needs 6.329113 AGT to do the same, so it's always better to buy and keep more AGT token to save more on Agate fees.

”

4. In order to bootstrap the Agate iFiat ecosystem while there is no transaction fee to buy any item inside Agate iFiat Ecosystem, for example, customers can go to any Agate Merchant, either in store or online, and pay 100 iUSD to buy some things, and merchants will receive the exact 100 iUSD, which they can use to pay to their suppliers who are also in this ecosystem, or they may prefer to cash out their funds to their cards or bank accounts. This is when we

charge them the equivalent of 1% of a withdrawal fee in AGT token (similar to when users load their cards).

5. Ordering cards, POS terminals, printing paper rolls or any physical merchant's accessories can be paid by AGT tokens; this would immediately add value to the tokens.

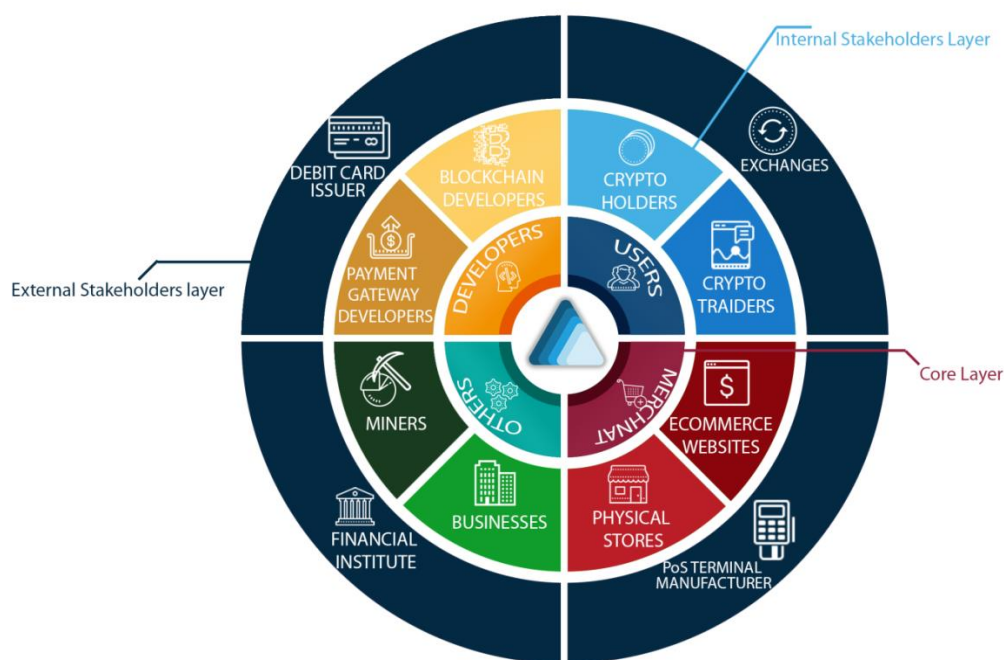
6. Agate Token Generator, as described in its section, allows everyone to create their own customised tokens. To do this, they should pay a one-off fee of 50 AGT. This can be done through Agate Token Generator GUI or Agate API Suite.

7. Any transaction, either inside iFiat Ecosystem or when businesses or developers create their own tokens, should be paid by AGT coin (like gas in Ethereum).

8. Once we switch to Agate's main net from our existing test net, all AGT coins would be minable, and as we use the Proof-of-Stake (PoS) method in our blockchain, and miners needs to buy a minimum of 50,000 AGT coins or create a public mining pool in order to start mining, this also would highly increase the demand for AGT coin.

9. Once our smart contract implementation is finished, in order to execute it in Agate, blockchain users need to pay in AGT coin.

10. B2B income, by having a comprehensive API suite, the whole suite can be used as white-label platform for those, first, who have their own customers and want to avoid banking fees (e.g., big supermarkets or petrol station chains) or companies who have their own customer acquisition methods and go to market strategy or enterprises who want to integrate Agate with their existing environment and application or even ERP. While they can generate their own iFiat tokens to make sure there is no other token issuer, all operations inside Agate blockchain would work only with AGT token, and also they should buy a API call package for each request as in the pricing table below plus 50 AGT tokens for initial account setup fee, which we will waive for the first 50 companies to get the ball rolling!



4.3 Token Structure (will be update)

Symbol: AGT

Token Protocol: ERC20, Etheruem Blockchain

TOTAL AGT TOKEN SUPPLY (100 %): 490,000,000 AGT

TOTAL AGT TOKEN SUPPLY FOR SALE (65 %): 318,500,000 AGT

OFFERED TOKEN EXCHANGE RATE: 1 AGT ~ 0.076 USD

MINIMUM CONTRIBUTION: \$60 USD ~ 0.1 ETH

MAXIMUM CONTRIBUTION: \$60,000 USD ~ 100 ETH (except accredited investors and strategic partners)

WHITELIST: 25/MAY/2018 – 20/ AUGUST /2018

PRE-SALE STAGE 1 –21/AUGUST/2018 – 31/AUGUST/2018 @ %25 Discount

PRE-SALE STAGE 2 –1/SEPTEMBER/2018 – 11/SEPTEMBER/2018 @ %20 Discount

PRE-SALE STAGE 3 –12/SEPTEMBER/2018 – 22/SEPTEMBER/2018 @ %15 Discount

PRE-SALE STAGE 4–23/SEPTEMBER/2018 – 3/OCTOBER/2018 @ %10 Discount

PRE-SALE STAGE 5– 4/OCTOBER/2018 – 14/OCTOBER/2018 @ %5 Discount

PUBLIC SALE: 15/OCTOBER/2018 – 15/NOVEMBER/2018 @ NO Discount

SOFT CAP / HARD CAP: 2,000,000 USD / 24,206,000 USD

Acceptance: ETH, BTC, LTC, BCH, DASH, EOS, USD

Lock Up period: All team's tokens will lockup for **one year period** on smart contract and vesting quarterly.

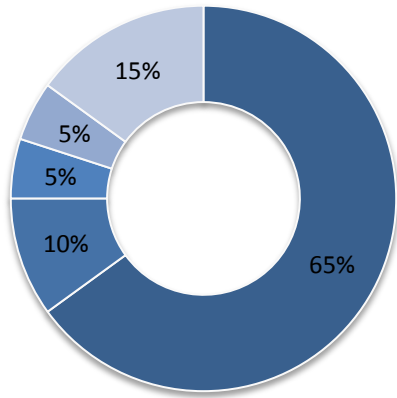
Unsold token: Burn by Smart Contract

Emission rate: NO new coins will be minted, created or minded after crowd-sale

Bonus and Referral: Yes (please refer to our website www.agatechain.org)

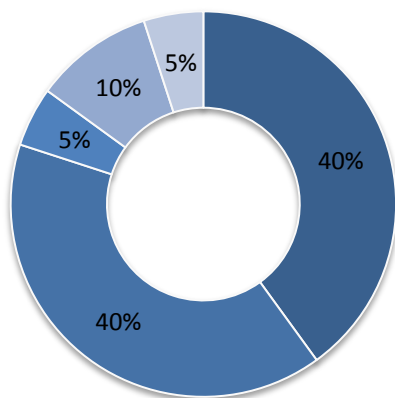
Restricted Countries: US and Singapore citizens

Distribution of Agate



- Crowdsale
- Team
- Advisors & Partners
- Bounty & Referral
- Reserved for Agate Ecosystem

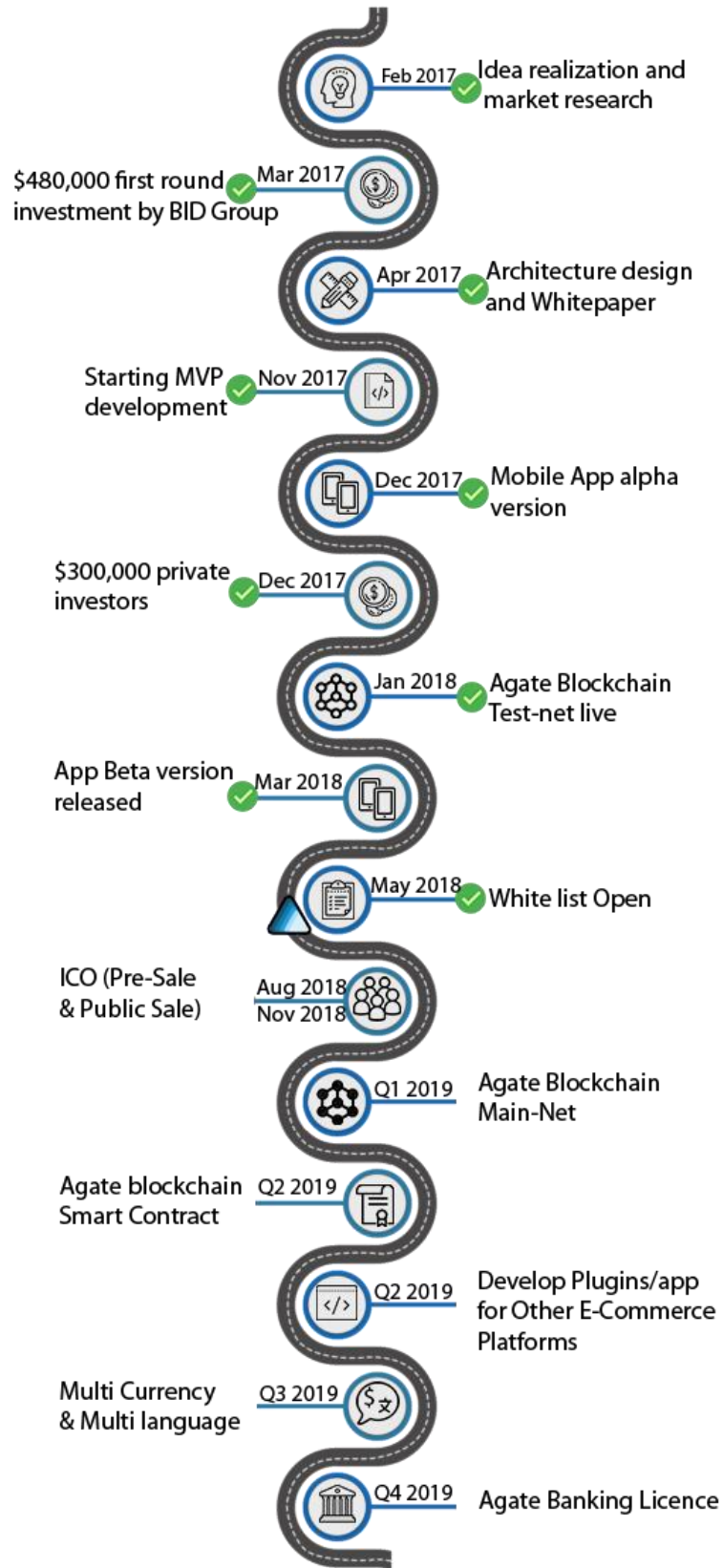
Distribution of Fund



- Research and Development
- Marketing, growth hacking, PR, Partnership, Affiliate program, ...
- Legal & Compliance
- Operation and Admin
- Unforeseen events

5 Appendix

5.1 Roadmap



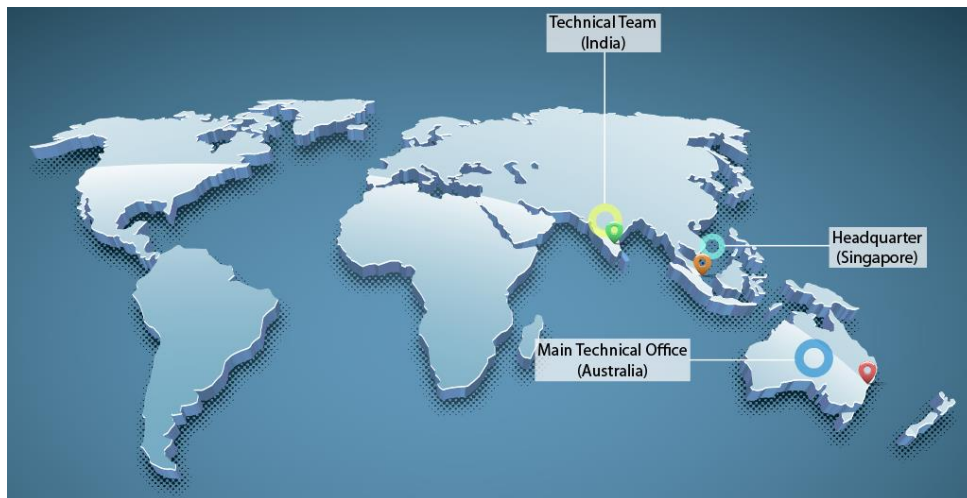
5.2 Compliance and Governance

Unlike most cryptocurrency apps, which only focus on technical functionality, Agate has been designed such that all functions and processes are fully aligned with different country regulations; this will protect companies' and users' assets. For example, the VAT/GST function has been implemented in the merchant app as an option, and merchants can activate it by clicking a button and receiving all tax receipts.

5.3 GDPR

The General Data Protection Regulation (GDPR [Regulation EU]) 2016/679^{xxxiii}, which will take effect on 25 May 2018, will force all foreign companies processing data of EU residents to comply with these regulations. This comes at the cost of a strict data protection compliance regime with severe penalties of up to 4% of worldwide turnover. One of the most important elements of GDPR is that it should allow all EU residents have their data erased from any system that has their information. Agate's architecture has been designed to comply with GDPR, and allows the users' details to be removed after use!

5.4 Who Are We?



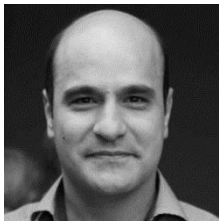
We are a global team with Agate, designed and implemented by Genesis Tech Pte Ltd, based in Singapore, and Engenesis Pty Ltd based in Sydney, Australia, companies are incorporated in Singapore and Australia respectively and are subject to that jurisdictions laws and regulations, with a design and development team of 59+ and a successful history of designing, implementing and running several technology start-ups and award-winning businesses, the Agate project started in February 2017 after deep investigation of current issues around micropayment and crypto asset management to find a simple, affordable and secure way to narrow the gap between fiat economy and cryptoeconomy and to let developers express their innovation skills on a comprehensive platform with minimal cost. Agate tree founders complement a triangle of business, industry insight, the best of marketing and legal professionals while also being supported with a strong and passionate technical team.

5.5 Team



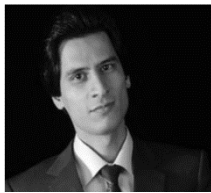
Hamed Taghvaei | Co-Founder & CEO

Hamed is an award winning serial entrepreneur with a tech and business background and currently own and running several successful business include founder of DroneOnline Australia, Co-Founder of King ICO, Co-Founder of BID Group, Co-Founder of BID Café, Co-Founder of BID Investment, founder of MyServo, he is also helps several startups to start and grow their business while he is in advisory board of Engenesis as Business Commercialisation advisor and also Startup panel advisor for Tusi Inc.



Hamid Ostad | Co-Founder

Hamid is highly experienced in bank-grade payments and authentication solutions for online financial transactions. Hamid has extensive experience in regional and international authentication and payment protocols that have been developed by major international card schemes. Hamid currently also works as the solution architect for BPAY Group.



Ali Dorri, PhD | Co-Founder

Dr Ali Dorri is among the first PhD candidates from UNSW University (Australia) who specifically focuses on blockchain technology and has been involved in many different successful blockchain projects for government and private sectors in smart home, e-health, smart grids and so on.



Ehsan Jadandarpour | CMO

Ehsan is one of the world's most famous tech influencers and has been listed in *Forbes* magazine as one of the top 20 growth hackers in 2016. Ehsan is also the author and contributor of many global tech magazines, include *Entrepreneur*, *The Huffington Post*, *Asia Times*, *Business 2 Community Business.com* and *Social Media Today*. Ehsan also work as a sales coach for Microsoft and Petronas and many more companies.



Steve Nouri | AI Lead

Steve is an award-winning technical leader specializing in machine learning, natural language processing, and advanced analytics. Steve has developed extensive computational and analytical expertise in a diverse range of application domains. He is responsible for the design, development and evaluation of text mining systems, both in commercial enterprise and research contexts.



Ashkan Tashvir | CTO

Ashkan has a sound passion for bringing technology and business principles together. A technology leader, experienced analyst, architect and a design-minded developer in multiple technology platforms, Ashkan is passionate about communicating complex ideas, acting as a bridge between the business and the technical teams.



Ariya Chittasy | CSO

With four start-ups in the last 8 years, including one awarded Fastest Growing Company Asia-Pacific (Business Excellence Awards 2014) and another growing into a 55+ company in under 2 years, Ariya thrives on materializing ideas into real businesses.



Sam Naseri | Software Architect

With over 12 years' experience as senior software developer, Sam helps us to seamlessly develop our user and merchant apps for both Android and IOS.



Anand Chellanadar | Director of Software Development Team in India

Anand has 13+ years of experience in Software design & development, web applications development, system security, mobile apps development and ERP solutions.



Jaemie Dela Pena | Product Design Lead

Jaimie is an experienced product designer with a demonstrated history of working in the information technology and services industry. She is skilled in product design, UX, sales and e-commerce.



Kalith Ahamed | Technical Lead

Kalith has over 12 years of experience across various stages of the Software Development Life Cycle and also web development using ASP.Net, RESTful API Design and Development, Distributed SAAS Solutions design and development, Native/Cross Platform Mobile app design and development and expertise in building solutions.

Our Advisors



Brenton Smith

Brenton is a proven, energetic IT application and system software company leader, having worked with a diverse range of large multinational firms in senior leadership roles, including VP and GM Symantec, CA, SAP, Siebel, Dell/Quest and Business Objects and SoftwareAG.



Samaneh Movassaghi, PhD

Dr Samaneh is an award winning technical expert with a diverse skillset in multidisciplinary domains including e-health, IoT,Blockchain, AI and Machine learning. She has been working closely with numerous startups in the deep tech and has won numerous research and innovation awards globally. On top of that, she also has experience with top tier industry partners such as Google, Phillips Research, Tata Consulting and Venture Capitals.



Nikzad B. Rizvandi Ph.D

Dr Nikzad is a data scientist and have a Phd in Distributed computing and data mining from University of Sydney he has an extensive experience in Ai, deep learning, Machine learning and Neural Network and practically involved in several sophisticated Ai and ML projects.



Gita Gitli Gita is highly proficient in banking industry and financial markets and with over 20 years extensive experience in major financial institute include the biggest Australian bank Commonwealth Bank Australia (known as CBA) has a significant role to mentoring Agate team to makes sure is fully alighted with the latest financial system standards.



Ehsan Fallahi

Ehsan is a principal at MistryFallahi Lawyers. Ehsan has a wealth of experience in advising businesses, start-ups and high-net-worth individuals across a range of industries, including technology, e-commerce and professional services.

5.6 Reference:

- ⁱ Howmuch | 2017 | <https://howmuch.net/articles/crypto-transaction-speeds-compared>
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- ^{xi} <https://www.osko.com.au/home>
- ^{xii} Australian New Payment Platform (NPP) official website | <https://www.nppa.com.au/the-platform/frequently-asked-questions/>
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