

What prevents anyone else using blockchain for ticket sales in this way and are you ahead of the game?

There are many competitors out there using blockchain for ticketing. Please check out our competitor analysis [here](#). We approach the solution in a very different way to most:

(a) we completely eliminate black markets. There is no fraudulent activity in our system.

(b) there is an extreme decoupling of the blockchain protocol and our app, unlike competitors. Our goal is to build a "rail" for the entire industry to use, that existing ticketing companies and new ticketing companies alike can plug into and share in the benefits. We decouple the ticket/event creation process and the promotion processes, effectively allowing anyone to pull events from our "pool" of verified and secure events on the protocol, and sell tickets for these events on their behalf and gain commissions for doing so.

We are ahead of the game in terms of product and client base. We already have released a public alpha and have grown a sizeable customer base.

In terms of preventing others - that is not our goal. We are making our code open source in the future and the protocol itself will have extremely minimal fees. We hope to be a tool that is used by others to get tickets to their end consumers.

Can "Joe Bloggs" buy and sell tickets without worrying about the blockchain backend?

Yes, we will be obscuring all crypto away from the user. Check out our [white paper](#) or our [clickthrough](#) to see a bit more detail about user experience. Aventus will integrate with fiat to crypto payment processors and handle users private keys, so that all someone needs to do is signup with email or facebook and pay with their credit card. Experienced crypto users will be able to manage their own funds and private keys through a separate DApp.

Will Ethereum be able to cope an increase in transactions in the future?

In the future we will minimise direct-to-blockchain transaction volume at any given point through the implementation of state channels, which are currently in the works. This won't be necessary until 2018, however, as we will be working with smaller scale events until then.

How many token are allocated for the signature campaign and social media campaign?

1% of all tokens are reserved for our social media campaign bounty program.

Do you have any escrow strategy?

We are using gnosis multisig wallet to hold funds. Keys will be held by Aventus (x3), Global Advisors Holding Limited, our corporate partner BNC and a law firm in Jersey.

What is the purpose AVT within the Aventus ecosystem?

AVT has two main purposes: stake-weighted voting on the legitimacy of events and applications on the protocol, and stake-weighted matching of buyers and sellers in the secondary market. Stake-weighted voting on the legitimacy of events and applications is necessary to prevent consumers from buying tickets for a fake event or from an application that falsely claims to use the Aventus protocol. AVT allows for the community to come to a decentralised consensus on real events and apps without the need for users to trust Aventus to fairly curate them. Stake-weighted matching of buyers and sellers on the secondary market creates anonymity between buyers and sellers, preventing unregulated touting. A fuller explanation of how AVT is used in the Aventus protocol can be found on our blog at [A closer look at the Aventus token-AVT](#) and in our [whitepaper](#).

How do people participate and gain rewards from their tokens?

As a token holder you can earn token rewards through voting on event legitimacy, application legitimacy, and system parameters. These rewards are weighted more heavily for correct votes. You can also participate in matching, which is the non deterministic matching of buyers and sellers in the secondary market, to earn tokens. These methods allow you to gain AVT by providing useful functions in the system, e.g. facilitating the secondary market and identifying fraud in the protocol.

What is Aventus Systems the company's revenue model?

We charge for the integration of our micro-services layer (APIs for ETH account management, fiat-crypto currency conversions, machine vision services and other microservices) and take commissions on sales made through our ticket selling application.

How is Aventus different from Blocktix?

We take completely different approaches. Aventus is an open protocol that allows anyone to join and incorporate into their ticketing application; it is a B2B solution, a ticketing infrastructure. At Aventus we are not trying to sell tickets ourselves; we are trying to build a rail for the industry - something that each and every ticketing app can plug into and leverage the security and promotion aspects we have designed. Blocktix, on the other hand, has a tight link between their app and blockchain technology in terms of advertising, etc. Unlike Aventus, they do not eliminate black markets and only solve some of the problems you see with promotion and counterfeit tickets.

We are building an open protocol completely decentralised so anyone can build on it and have various competing applications all benefiting from our solutions to the problems of touting, counterfeits, oversight and ultimately unsold ticketing inventory. Their view on touting takes a more centralised approach.

Basically, ticketing Dapps will be built over Aventus, but Blocktix will be an app in itself, directly communicating with the blockchain. The difference is similar to Gnosis (as Aventus) vs. Augur (as Blocktix).

Check out our blog post for more detail:

<https://medium.com/aventus/aventus-competitor-analysis-b34fe449aab1>.

Have any audits been done on the contracts?

Audits have been done by DappHub. You can see the audited code on our Github at <https://github.com/aventussystems>.

In the white paper you say:

A ticket and ID validation service where attendees' faces will be scanned and compared to photos uploaded at point of purchase using machine vision.

Is machine vision facial recognition already practical? Is this process necessary as it sounds like it hurts privacy?

There are already plenty of state of the art identity recognition software packages in existence: we will not be pioneers. You can even find such machines being relied on at airports (such as Heathrow) for passport and customs checks. No specialised equipment is required. Event organisers can deploy it from a mobile phone while ticket holders are queuing at the entrance, with over 85% accuracy. Those worried about 'big brother' can opt to use credit cards or ID documents for identification, or voice recognition. In the longer term we will also integrate with identity solutions like uPort or Civic.

What if a user doesn't have a smartphone and cannot link his face or his ID to the ticket before the event?

Identity is linked to a ticket at point of purchase, whether on an app or desktop website. A QR code can then be printed out and presented at the event, where the event organiser scans it and retrieves the information required to validate the user from the blockchain.

How does blockchain prevent counterfeits? As long as there is an option to print, can't copies or fakes be made?

Blockchain provides an immutable record of transactions. When you buy a ticket through the Aventus protocol you can verify that the ticket actually exists and has not already been purchased. If a user attempts to purchase a ticket online that turns out to be fake, they will be alerted that the seller does not actually hold the real ticket. Any attempt to sell a ticket offline will not reflect the change of identity of the ticket holder on the blockchain, and thus be invalid. This will also prevent counterfeits from being sold off chain.

What if I can't go to an event and want to give my ticket to a friend?

When you buy a ticket, you are asked for a list of friends (e.g. a sublist of facebook friends or phone contacts) who you would like to be able to transfer it to. This list is finalized once the ticket is purchased. Should you be unable to go, you can send the ticket to anyone in your predetermined list. You can always sell your ticket on the secondary market, however, but we cannot ensure that a friend will receive it due to the random nature of this market.

What ultimately gets stored on the Ethereum blockchain?

A global registry of events and a DApp/App whitelist will be stored on the blockchain. Within the event contracts will be pointers to full information on IPFS (e.g. title, description, start dates, media, etc). All ticket purchases and transfer history will also be visible on the blockchain, but purchaser details will be fully encrypted.

What is required for the DApp competition? Do I need to code?

To enter the DApp competition you must adhere to the [Aventus DApp Proposal Standard](#). No coding is required for the DApp competition: providing a detailed description of how the DApp would work and tie-in to the Aventus protocol/services layer, as well as how it would drive value for the Aventus ecosystem, is sufficient. More details are available [on our blog](#). For full entry requirements please visit [the Github repository](#).

Token Sale Related

When was the pre-sale and how can I get involved?

The pre-sale was reserved for strategic partners and is now over. Strategic partners are defined as those who can provide value in such a way that Aventus is better positioned to gain market share. Anyone can participate in the public sale, running for 7 days from 12:00 (noon) UTC September 6th, until 12:00 UTC September 13th.

Will you have a whitelist?

Yes. Details coming soon.

When is the token sale? What are the terms?

The token sale will run from 12:00 (noon) UTC September 6th, until 12:00 UTC September 13th. During this entire period, AVT will be available for a constant price of 92 AVT per ETH. There will be a hard cap of 6,000,000 AVT sold. Full details are available [here](#).

When do we receive AVT? When will it be tradeable? What exchanges will you be listed on?

You will receive AVT immediately after purchase, with the token becoming transferrable after the token sale ends on the 13th of September **or** after the hard cap is hit. AVT will be exchangeable from the 13th on GateCoin and we are in talks with other exchanges, with more details to come soon.

Will it be possible to track how much ETH has been raised?

We are planning on having a live update on [our homepage](#), showing the exact amount of Ether raised and where it falls in relation to our hard-cap.

How are you ensuring token sale contributor security and safety? How are you stopping what happened to Enigma from happening to you?

We will provide information through multiple channels. On our website you will find the contribution address and information on how to independently verify the address on Etherscan using ENS. All contributors should make sure that all data sources line-up before contributing.