



A Blockchain-Based Event Ticketing Protocol

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LIGHTPAPER

1 The Challenge

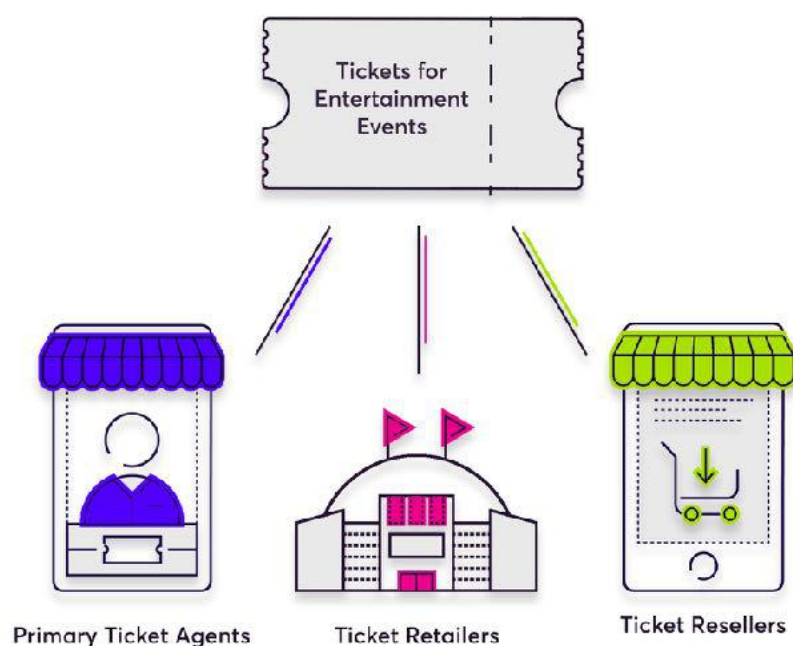
Aventus is Solving

We believe that the challenges in the ticketing industry (see Aventus whitepaper V4, Section 1.1-1.3) have not yet been comprehensively addressed by technology, legislation, or self-regulation. Consumers and industry stakeholders have understandably become pessimistic as to whether the ticketing market will ever change for the better.

Consumers increasingly demand a fairer experience, with more transparency over how they are purchasing tickets and where they come from (e.g. primary or secondary seller), and less chance of being victims of sky-high scalping prices or outright scams. A report we commissioned in September 2018 revealed that 72% of U.S. concert-goers would attend more events if purchasing tickets online felt more secure. Secondary platforms should be incentivised to act as 'good actors' within the ticketing ecosystem, providing better consumer experience (and so driving repeat custom) while continuing to support consumer choice.

Meanwhile, primary ticketing agents and rights-holders need better operational transparency and greater controls throughout the lifecycle of their ticketing inventory - including control and visibility over how different parties in the supply-chain can interact with it.

Artists, managers and record labels want more say in how their inventory is priced and how that pricing is perpetuated throughout the ticketing lifecycle, from initial sale right up to when it is presented by the ticket-holder for access to the event.



Our goal is to remove siloes and create an open ticketing ecosystem where all parties in the ticketing supply chain can work together to gain internal operational transparency and deliver greater security to consumers.

2 The Aventus Solution

2.1 Overview

The Aventus solution is designed to enable ticketing organisations to exert more control over their inventory and processes, engage more directly with other players within the supply chain and with consumers, and explore new methods of monetisation.

This ecosystem is underpinned by the Aventus Protocol, a global open standard for the exchange of tickets built upon the Ethereum blockchain. The Aventus Protocol is open source and available for all developers to leverage or build upon. For detail on the wider Aventus ecosystem, please refer to Aventus Whitepaper V4, Section 2.2.

The Protocol is designed to support and facilitate events organisers and inventory holders by giving them tools to set controls around how their tickets are transacted and transferred. Through use of smart contracts, the Protocol enables a secure, controlled and traceable supply-chain that eliminates counterfeits and prioritises rights-holders.

Tickets stored on the blockchain each have a unique identifier, making it easy to track a ticket's UTN (Unique Ticketing Number) as it travels through the supply-chain. This facilitates greater security, control, internal operational oversight and easy proof-of-ownership.

It should be noted that Aventus itself remains neutral and objective when it comes to the setting of parameters for ticket sale and resale, which are selected and set by inventory holders to best fit their business models. Aventus does not own, sell or distribute inventory, or dictate rules to players within the ecosystem.

To build a bridge to the blockchain, Aventus also partners with, supports and endorses the creation of B2B and B2B2C apps and services created by third-party service providers, ticketing agencies and developers. These provide a critical function in bridging the gap between the Protocol and the existing tech stacks of traditional ticketing industry entities.

2.2 Key Benefits

1. Increased Control Over Inventory

The Aventus Protocol gives rights-holders the tools to set and enforce rules around how their tickets are transacted and interacted with in the ticketing supply chain. This includes setting price caps, whitelisting approved resellers, and even defining processes which ensure access to a proportion of secondary market resale revenues. For artists actively trying to eliminate or restrict ticket scalping, these controls give the promoter the ability to outlaw resale altogether, or to set rules that stipulate face value transfer only.

2. Increased Security & Decreased Fraudulent Behaviour

The Aventus Protocol opens up a fairer and safer experience for consumers by enabling inventory holders to prohibit unauthorised resale on the blockchain, preventing bad actors from transferring tickets. Through the blockchain, consumers will be able to verify the legitimacy of their own tickets, and find a validated list of official ticket outlets. Duplicate or counterfeit tickets will be impossible on the Aventus Protocol due to each ticket's unique identifier. Participants in the ecosystem are rewarded for identifying fraudulent events or activity (see 2.4), creating a self-governing community.

3. Increased Internal Transparency and Consumer Insight

The Aventus Protocol gives ticketing agents the ability to understand and target existing consumers more effectively and to discover new audiences. By combining data held on the blockchain with internally-held consumer data-sets, agents can derive powerful insight; e.g. who bought tickets, how many times each ticket was transacted and who touched it at each point, whether a ticket was redeemed on the door, the identity of the redeemer. Going further, it becomes possible to analyse, audit and support counter-claims against charge-backs (avoiding unnecessary revenue loss), and even to implement tighter access controls and blacklist undesirable attendees.

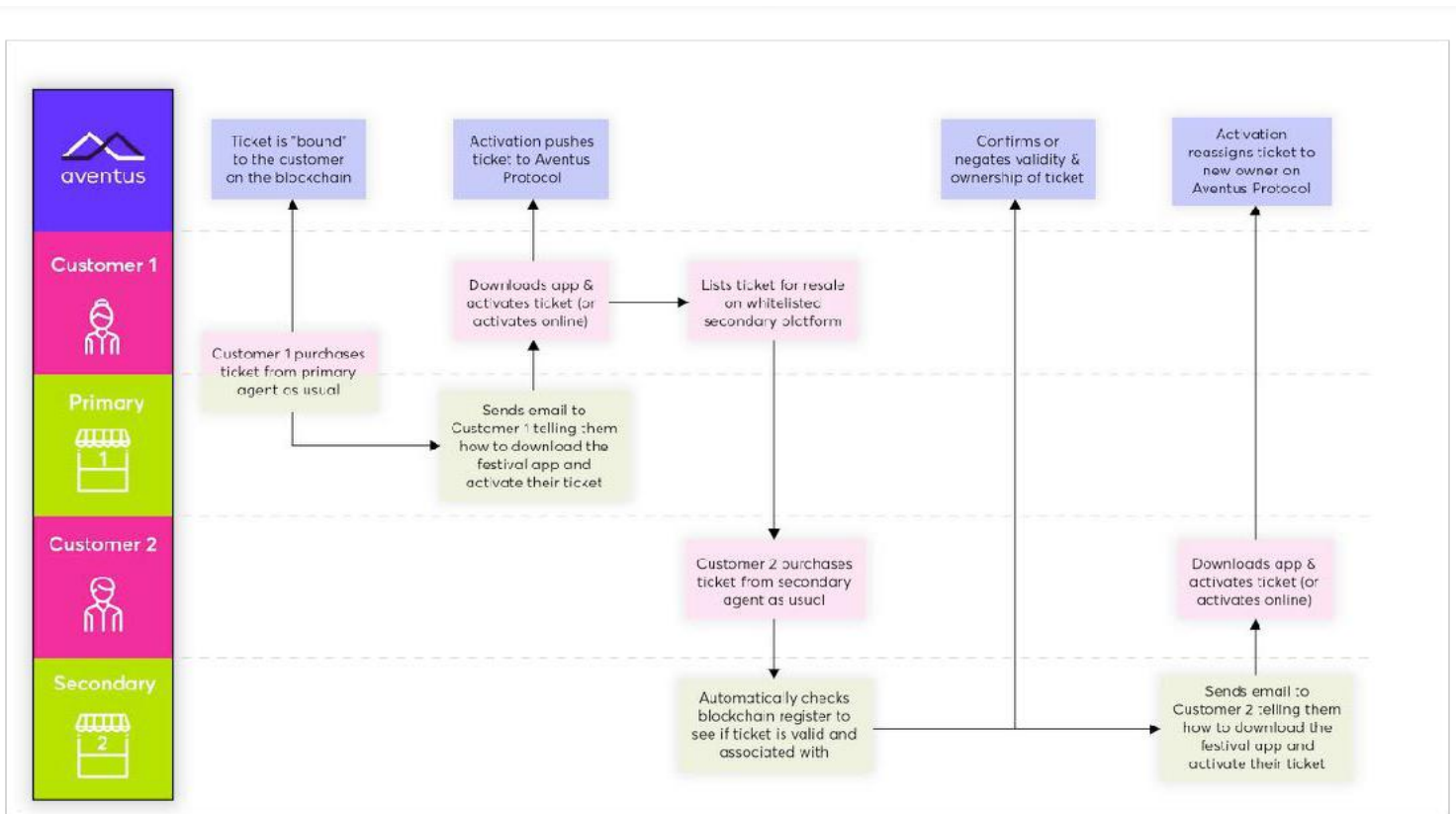
4. New Revenue Opportunities

The Aventus Protocol supports artists and event organisers by enabling events to reach a wider or more targeted audience:

- Event organisers can whitelist chosen promoters and sales channels, giving full curated control over the audience their inventory reaches - and even letting them take a proportion of revenue from secondary sales.
- By decreasing the barriers to entry of becoming a sub-promoter and monetising word-of-mouth awareness-building, event organisers can decrease marketing costs and increase reach into target-markets.
- Administrative overhead associated with managing compensation can also be reduced, since this can be completely automated by smart contracts.
- Event organisers can reward promoters with a commission on ticket sales they are responsible for generating.

2.3 How Might This Work?

The below flowchart shows a real-world example of how the ticketing transaction process can work when integrated into an event organiser's existing apps and services.



2.4 AVT Utility Tokenomics

The Aventus Protocol Token (AVT) is critical to the functioning of the Aventus ecosystem. By aligning the economic incentives of participants, it creates a decentralised, self-regulating environment.

The main purposes of AVT as a utility token are:

- To provide an incentive layer that enables self-regulation of the Protocol by leveraging stake-weighted voting mechanisms (see Aventus whitepaper V4, Section 3.1).
- To reward early adopters of the Aventus Protocol, enabling it to benefit from network effects (as the number of events stored grows, the greater value to third-

party applications; correspondingly, the greater value to third-party applications, the more the number of events stored on it will grow).

There are three primary use cases envisaged for AVT: **event hosting**, **community stake** and **matching**. For more on each of these use cases, see Aventus whitepaper V4, Section 2.4.2.

3 Further Reading

Aventus – A Blockchain Based Ticketing Protocol - Whitepaper Version 4.
<https://www.ventus.io/doc/whitepaper.pdf>, 2018. Online: Accessed 20 Sep. 2018.

Waterson, M. Independent Review of Consumer Protection Measures Concerning Online Secondary Ticketing Facilities. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/525885/ind-16-7-independent-review-online-secondary-ticketing-facilities.pdf, 2016. Online: Accessed 20 Sep. 2018.

Waterson, M. Ticketing as if Consumers Mattered, 2018.

Leonhardt, M. CNBC: About 12% of people buying concert tickets get scammed.
<https://www.cnbc.com/2018/09/13/about-12-percent-of-people-buying-concert-tickets-get-scammed-.html>, 2018. Online: Accessed 21 Sep. 2018.

