

How Sympla used blockchain to solve ticket counter eiting: A case study

Discover how Sympla, in partnership with Lumx, leveraged blockchain technology to enhance ticket security and improve user experiences at large-scale events.



Introduction

Ticketing is a massive industry, with platforms like **Sympla**, the largest in Latin America, managing millions of tickets and events annually. However, the sector faces significant challenges, particularly regarding **ticket counterfeiting** and **exploitation of the secondary market**. These issues affect both **event organizers** and **attendees**, leading to financial losses and diminished trust in the ticketing process.

In this blog, we explore how Sympla partnered with **Lumx**, a blockchain infrastructure startup, to address these challenges using **blockchain technology** and **tokenization of tickets**. This innovative approach not only ensured **ticket authenticity** but also enhanced the overall event experience by allowing for safer and more transparent transactions.

The problem: ticket counter eiting and secondary market exploitation

With a user base of over **15 million active users** and issuing **40 million tickets annually**, Sympla encountered persistent problems with counterfeit tickets. These fraudulent tickets resulted in financial losses and created a frustrating experience for fans who were denied entry to events they believed they had paid for.

In addition, the **secondary market** often saw tickets resold at exorbitant prices, creating an unfair marketplace for consumers. Event organizers were powerless to control the resale of their tickets, leaving fans frustrated with inflated prices and unregulated transactions.

The solution: ticket tokenization using blockchain technology

To solve these issues, Sympla joined forces with **Lumx** and **Polygon Labs** to create an innovative system of **ticket tokenization** using blockchain. **Tokenized tickets** are issued as **unique digital assets** on a blockchain, ensuring their **authenticity** and enabling **ownership tracking**. This approach offered a **secure, transparent, and tamper-proof** solution to ticket fraud, while also opening new possibilities for managing the secondary market.

Key features of the blockchain solution:

- **Authenticity and Ownership:** Each ticket is issued as a unique, non-fungible token (NFT), ensuring that it cannot be duplicated or tampered with.
- **Smart Contracts for Secondary Market:** **Smart contracts** regulate ticket sales on the secondary market, preventing exorbitant resales and ensuring that tickets are resold under fair conditions.
- **Seamless Integration:** Lumx's APIs allowed Sympla to integrate blockchain functionality into their platform with minimal disruption to the user experience.

How the Lumx Protocol powered the solution

The **Lumx Protocol** provided Sympla with a powerful set of tools and APIs to seamlessly integrate blockchain into their ticketing platform. Three key modules from the Lumx Protocol were instrumental in this integration:

1. Wallets API:

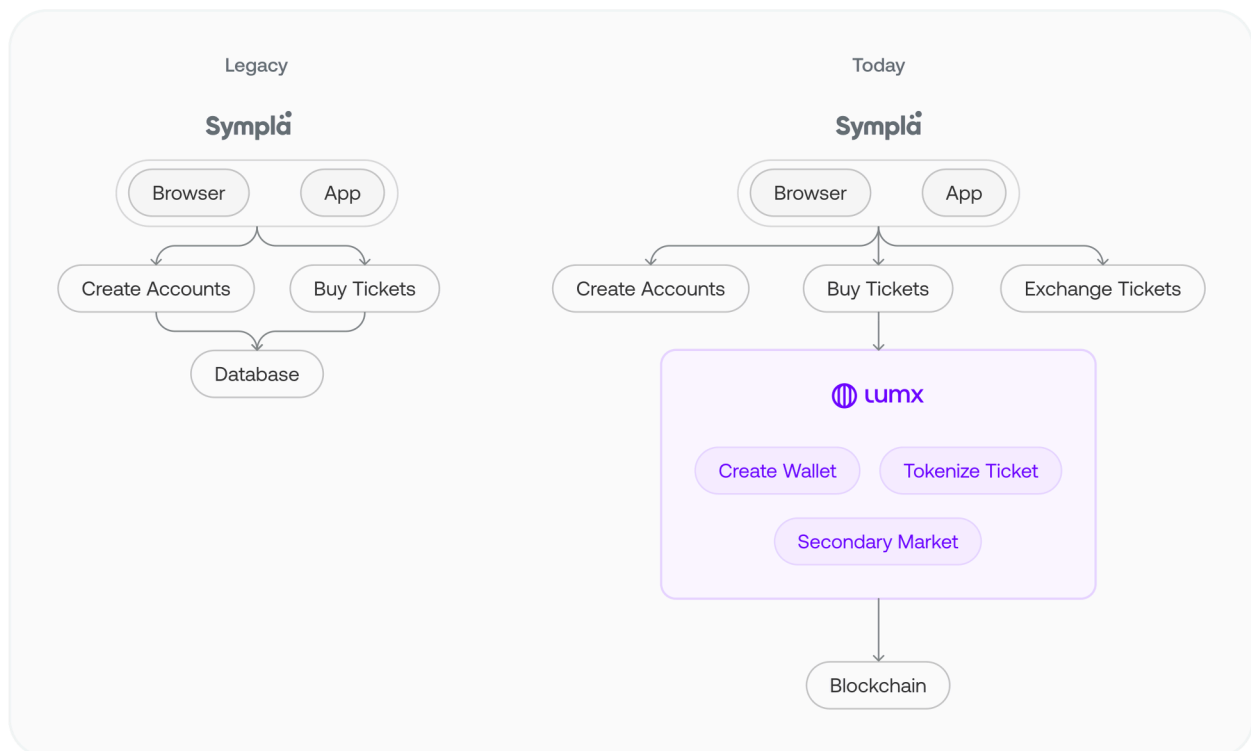
This module facilitated the **secure management of digital assets** for users, allowing them to store and manage their tokenized tickets without needing blockchain expertise. The integration allowed users to log in using **social accounts**, and transactions were managed through **gas-free** mechanisms, ensuring a smooth and secure experience.

2. Contracts API:

Sympla leveraged the **Contracts API** to create and manage smart contracts that automated the ticketing process. With **pre-audited templates** available, Sympla quickly implemented features that ensured **secure transactions** and **controlled resale conditions**.

3. Transactions API:

The **Transactions API** allowed Sympla to handle **large-scale ticket transfers** efficiently, ensuring that ticket issuance, resales, and transfers occurred in a **secure, low-cost**, and **scalable** manner. This ensured that even large festivals could manage their ticketing process seamlessly.



Implementation: A step-by-step guide

The integration of the Lumx Protocol into Sympla's platform followed a structured process:

1. **API Integration:** The Lumx team worked closely with Sympla's engineering team to integrate the Lumx Protocol APIs into Sympla's platform. **User Experience:** An intuitive interface was designed to ensure users could easily buy, sell, and transfer their tokenized tickets without needing prior blockchain knowledge. **Deployment on Polygon Network:**
2. The solution was deployed on the **Polygon blockchain**, ensuring scalability and low transaction costs essential for a large-scale platform like Sympla. **Testing and Launch:**
3. After successful testing, the solution was rolled out, with major festivals like **Rock The Mountain** already adopting the technology.



Promotional image for Rock The Mountain.

Results: revolutionizing ticketing with blockchain

The results have been overwhelmingly positive. Users praised the **security** and **convenience** of tokenized tickets, and event organizers have seen a significant reduction in **fraud**. In addition to eliminating counterfeit tickets, the **smart contract-enabled secondary market** provided a **fairer and more regulated** system for ticket resale.

Sympla's implementation of blockchain is a significant milestone in the **events industry**, not only solving longstanding problems but also introducing new opportunities for event organizers to engage with fans, such as through **collectible tickets** and **exclusive experiences** for ticket holders.

Future opportunities: the next steps for tokenization

Building on this success, Sympla and Lumx are now looking to expand the use of blockchain technology to more events and explore additional functionalities. Future plans include the launch of a **ticket resale ecosystem** powered by smart contracts, allowing for a **consumer-to-consumer (C2C)** secondary market that is transparent, secure, and legally compliant.

Conclusion

The partnership between **Sympla**, **Lumx**, and **Polygon Labs** has set a new standard for **ticketing security and transparency** in the events industry. Through the use of **blockchain technology**, Sympla has not only eliminated ticket fraud but also created a **more inclusive** and **engaging** experience for event attendees. With tokenization leading the way, the future of ticketing is brighter than ever.