TKT

A fair and transparent ticketing platform based on blockchain technology

Jana Spörri, Claude Müller, Simon Bachmann, Lucas Thorbecke

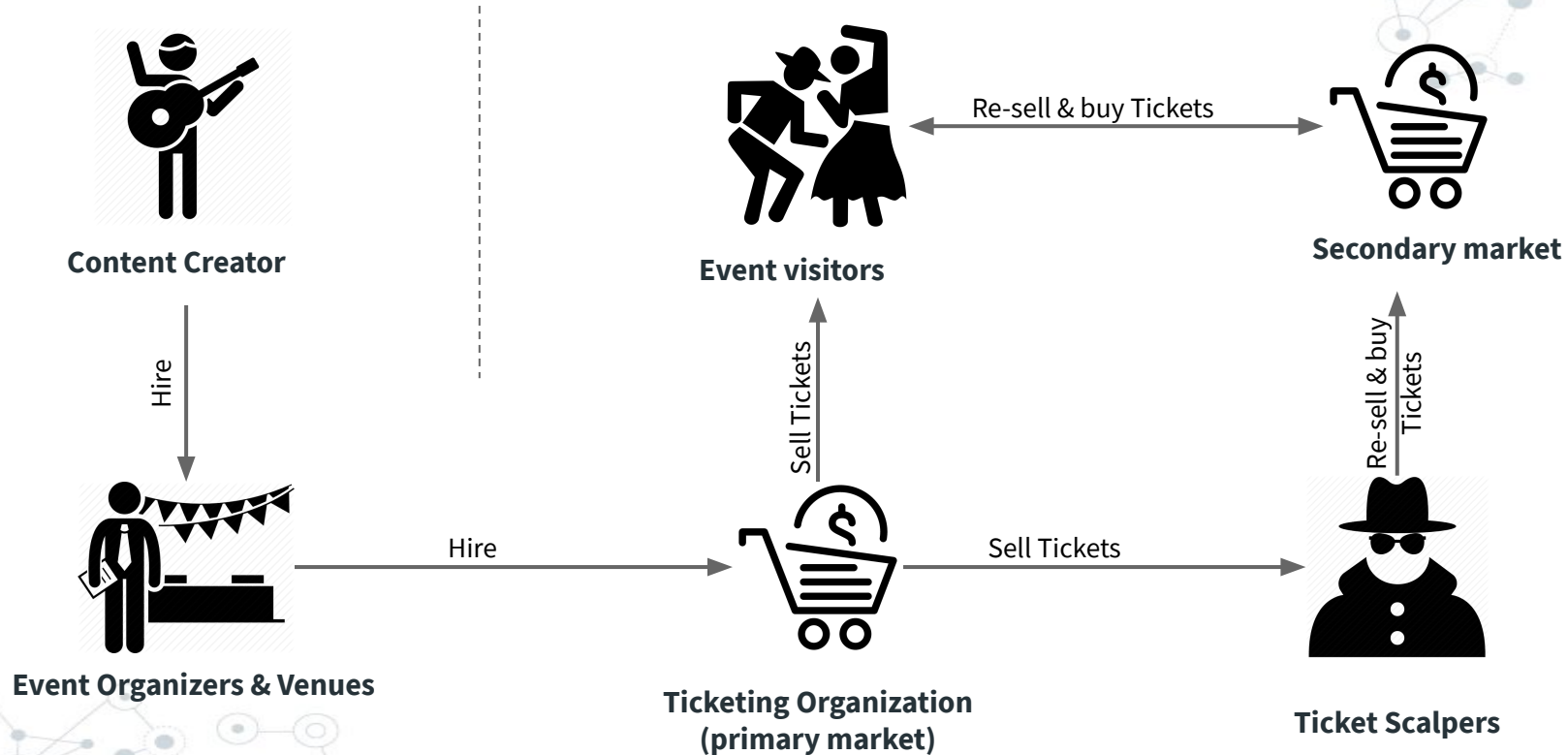# Problem Statement

Today's Ticketing Industry

Content Creator

Hire

Event Organizers & Venues

Hire

Ticketing Organization (primary market)

Sell Tickets

Event visitors

Re-sell & buy Tickets

Secondary market

Sell Tickets

Re-sell & buy Tickets

Ticket Scalpers

Issues

Primary Market:

◎ Many intermediaries lead to price intransparency

◎ Ticketing organizations maximize profit

◎ Event organizer hands control over to ticketing organization

◎ Disconnects content curator from event visitors

Secondary Market:

◎ A lot of arbitrage

◎ Creation of false scarcity

◎ Sell copied or redeemed tickets

◎ Counterfeiting tickets

◎ Incentives to steal tickets

◎ No ticket traceability

◎ Dissatisfied fans

What Stakeholders Want

End Users

Fair prices for tickets

Fair chance of purchasing tickets

Secure and convenient shopping experience

Content Creators

Sell tickets to the right audience

Increased event attendance

Ability to connect and interact with the fan community

Event Organizers

Effective sales distribution channel

User data collection

Venues

Easy and save event entrance process

Ability to sell complementary products and services

Necessary Improvements

◎ Authenticity of a ticket needs to be validatable

◎ Bind ticket to an identity but still allow ownership transfer

◎ Ensure ticket traceability on primary and secondary market

◎ Make ticket price allocation transparent

◎ Remove ticketing intermediaries

Smart Tickets on the Blockchain

Smart? Ticket knows when ownership changes and dictates its own price (and additional requirements if needed) when being transfered.

Enabling Technology

Public Blockchain

◎ Immutable, transparent data storage for tickets

◎ Decentralized control building trust in the hosting infrastructure

◎ Fault tolerant

Smart Contracts

◎ Govern issue, transfer and validation of tickets

◎ Automatic and transparent fee charging and distribution among stakeholders

Solution Architecture

◎ Cut out the middlemen (ticketmaster and co) and their horrendous fees.

◎ Avoid profiteering by self regulating resale prices within the event ticket contract.

◎ Avoid counterfeiting tickets by transparently linking tickets to a public key and a real identity.
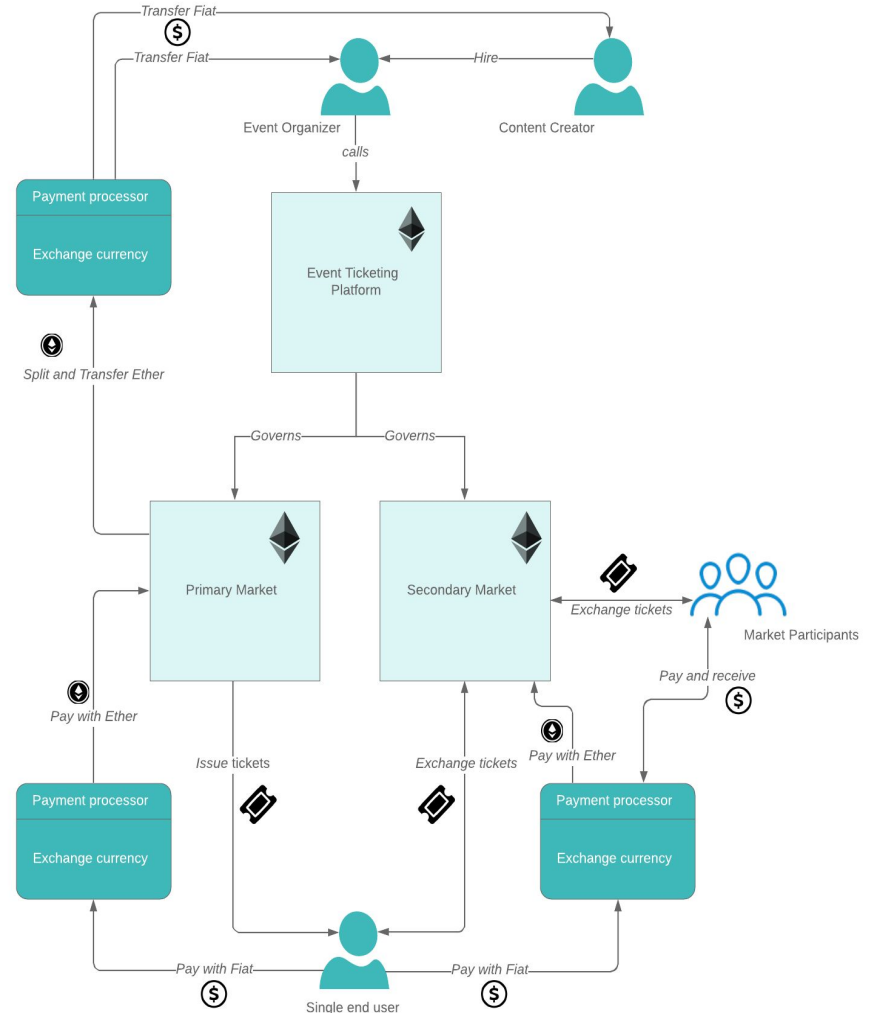
Competing efforts

Ticketmasters' Swipe Your Card

Requires the event goers to swipe their credit card used for the purchase of the ticket.

-> Completely kills secondary market.

Ticketswap (secondary online marketplace)

Has a restriction on the possible mark of 20% on the resold tickets.

-> Is still decoupled from the primary market and tickets can be sold and faked anywhere else.

Ticketmasters' Verified Fan Program

Allows "real fans" to sign up in advance and get priority to buy tickets.

-> Scalpers can sign up as well! Just counters bots.

Business Model Canvas

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
	Key Resources		**Channels**	

Cost Structure	Revenue Streams

Value Propositions

- Transparent Cost Structure

- Transaction History on Blockchain

- Mobile Application, Website

- 3d Party Integration

Customer Relationships

- Viral Loop

- Community Management

- Loyalty Bonuses, Discounts and Gamification

Channels

- Website

- Mobile Application

- Social Media

- TKT-Button

Customer Segments

- Event Organisers
    - Specific Companies
    - Venue Owners
    - Artists

- Ticket Buyers
    - Regular Event Attendees
    - Affiliates, Brand Ambassadors, Influencers
    - Third party ticket distributors

Key Partners

- Event Organisers

- Affiliates, Brand Ambassadors and Influencers

- e-Identity Providers

Key Activities

- Software Development

- Social Media Marketing

- Event Management

Key Resources

- Employees

- Software Assets

Cost Structure

- One Time Costs:
    - Hardware, Office Supplies
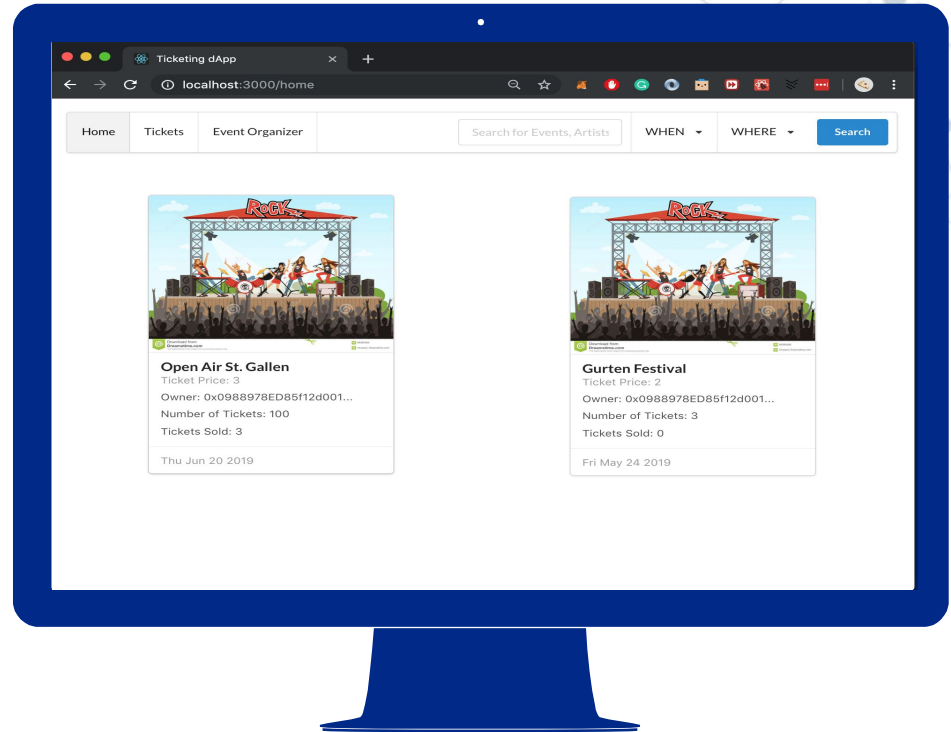- Recurring Costs: Personnel Costs, Hosting Costs, Office Space if needed

Revenue Streams

- Fee on every Ticket sold

- Advertising

Prototype Technologies

◎ Ethereum - Solidity for Smart Contract
◎ Ganache
◎ Truffle
◎ Metamask
◎ ReactJS

Demo

Extensions & Upgrades (1)

E-Identity

Ticket linked to an ID

Prevent secondary market, fraud and wrong incentives

Lottery Presale Distribution

Ability to register for presale

Fair, transparent and retraceable on-chain lottery

Affiliate Marketing

Register affiliate id within the SC

Transparent, guaranteed and instant payout

Dynamic Ticket Pricing

Ability to resell tickets to any price below the original ticket price

Extensions & Upgrades (2)

Stable Coin Integration

Pay and receive asset-backed currency

No worries about currency volatility

Fiat Gateway

TKT Button, JS-Library

Simple integration on artists websites with few lines of code

No need for payment processor

No additional logic required

Direct Tax Payment

Less bureaucracy, surveillance by the government

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