TicketChain

Problem

Problems with current Ticket Systems

This happens every month!

Problems with current Ticket Systems

Issues:

- Paper tickets can be lost
- Queues and waiting time
- Priorities between users
- Ownership of the Tickets
- Notifications and alerts
- Digital Tickets divided in multiple apps

Who is affected by this issue?

- Primary Users:
  - Everyone who owns a transportation card, and renews it every month
  - TODO - Problemas relacionados tal como os secundary
- Secondary Users:
  - The workers in the transportation facilities!
    - Overwhelming number of people
    - People are not usually super polite
    - People act as if it was the workers fault

Stress

- Tertiary Users:
  - Everyone related to both primary and secondary users!

Another example

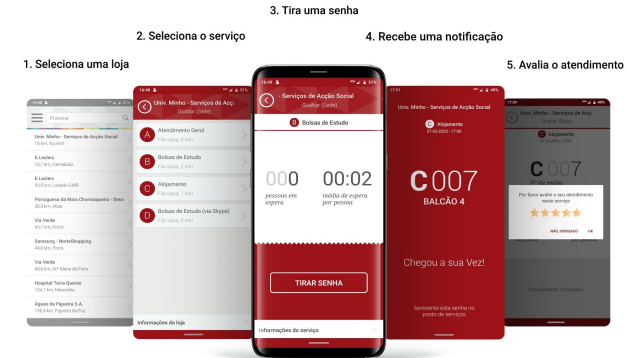Primary and Secondary users would swap!

Current Systems - Scenarios

Current Systems - Applications

Pain points - What does not work

01 **Local Ticket Machine**
Having to physically move to a place to issue a ticket is time consuming and bothersome

02 **Limited Ticket Numbers**
If we have tickets 0 to 100, there is no ownership guarantee e.g.: 2 tickets both numbered 37

03 **Ticket on Paper**
Having a ticket on paper wastes more resources and is prone to be lost

Pain points - What works

Digital Ticket
Issued anywhere, no waste of paper, easily storable and retrievable in a mobile device (e.g. smartphone)

01

Information on Digital App
App has information about current ticket, estimated waiting time, etc. all available anywhere
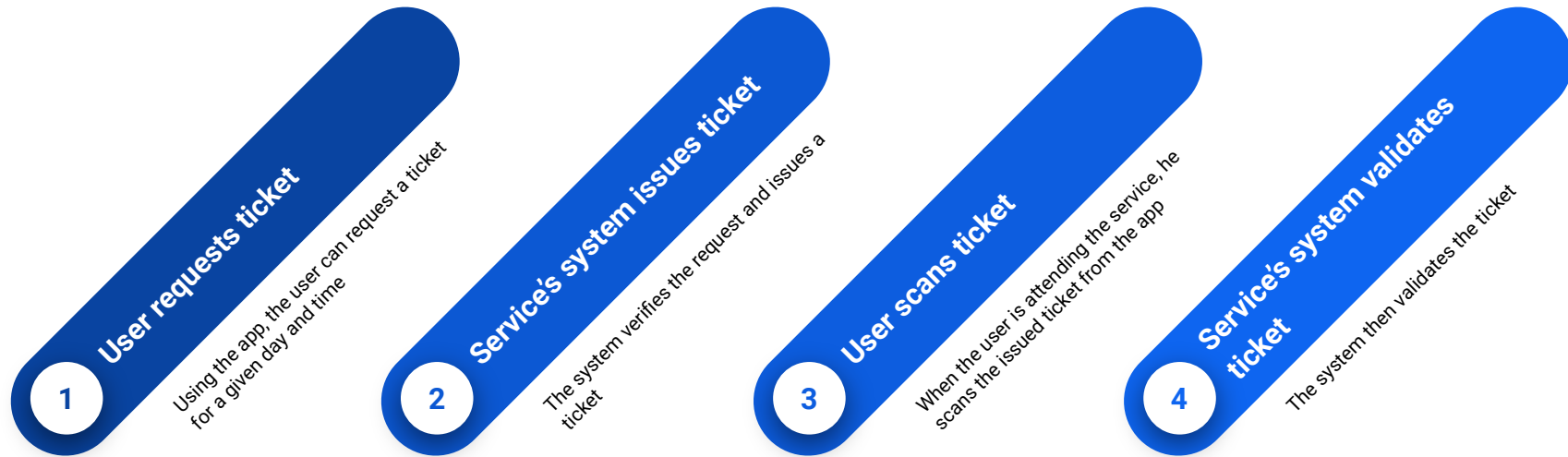
02

Ticket Ownership
Ticket associated to a personal account or legal document can guarantee ownership

03

Solution

- Ticket emission and validation
- Built on top of a blockchain
- Providing
  - Decentralized system
  - Integrity
  - Authentication
- Easy to use
- *Single application with all tickets*

Solution

1 User requests ticket

Using the app, the user can request a ticket for a given day and time

2 Service's system issues ticket

The system verifies the request and issues a ticket

3 User scans ticket

When the user is attending the service, he scans the issued ticket from the app

4 Service's system validates ticket

The system then validates the ticket

User Research Methodologies

- Ethnographic Studies

- User Interview

- Questionnaires

Secondary Research

- The Aventus Protocol is an existing blockchain protocol used to make purchasing live show tickets more transparent and more profitable.

- The protocol generates a unique identity for each ticket and stores it on a public blockchain. Each ticket transaction is also recorded publicly.

- The protocol's goal is to combat counterfeit tickets, uncontrolled resale, and opaque pricing.