



# Participatory design of token economies for local communities

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5th Distributed Ledger Technology Workshop

# Blockchain For Social Good

(Social  
Economy)

Applications

<https://www.grassrootseconomics.org/pages/sarafu-network>

<https://joincircles.net/>

<https://trustlines.network/>

## Different from DeFi applications

- >>> Requirements
- >>> Incentive mechanisms
- >>> Governance
- >>> Scale (global vs local communities)

## Examples

- >>> Sarafu Network
- >>> Circles UBI
- >>> Trustlines

# OPEN ISSUES

*(Blockchain for  
Social Good  
Report 2022)*

**Peer to  
peer cash  
system**

How **bridges** could develop between the real **economy**, whether **informal** or **formal**?

How to **overcome technical obstacles** to the adoption of cryptocurrencies?

**Governance  
and  
Democracy**

Need for **new forms of governance, more participatory**, transparent and decentralized.

Financial and speculative logics can take precedence over decentralization, horizontality, independence or transparency

**Production  
and  
consumption**

**Few empirical cases** and experimentations within local communities

# The challenge: MAKING THE BLOCKCHAIN CIVIC



## WHY?

- To make the blockchain advantages accessible to local communities
- To support social collaborative economies and related participatory processes
- To offer an alternative to speculative cryptocurrencies in global financial markets

## HOW?

- Internet of Values 2.0
- Technical and economical accessibility

# Why blockchains for LOCAL COMMUNITIES?

- Cities are often organized in small interconnected communities
- ... made up of citizen, associations, businesses...
- .. that are managed with different tools and rules

**Tokenization** and **smart contracts** can provide a layer to:

- Represent communities' rules with common tools
- Enhance interoperability
- Create new inter-community services

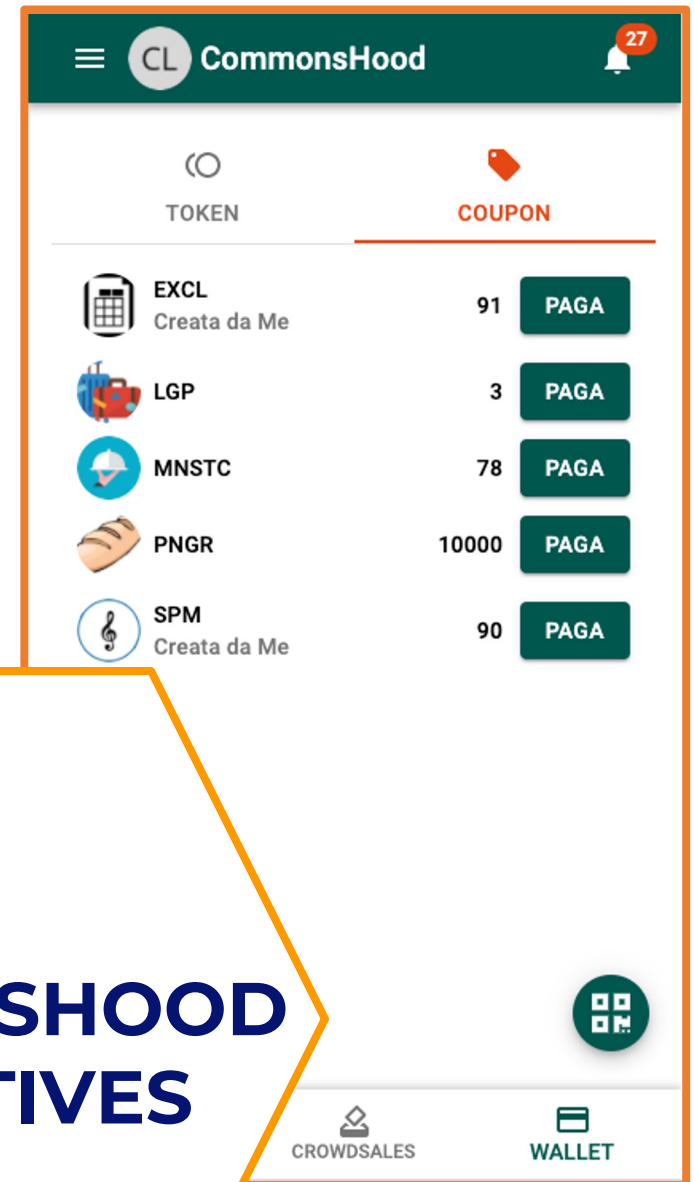




# COMMONSHOOD

Concept and aims

- Providing communities with instruments for **financial inclusion**
- Supporting **sustainability** of the local economy.
- Facilitating and enhancing the **interactions** among the local socio-economic actors.
- Create a toolkit **replicable** in different communities



## COMMONSHOOD OBJECTIVES



CommonsHood promotes the **Internet of Values 2.0**



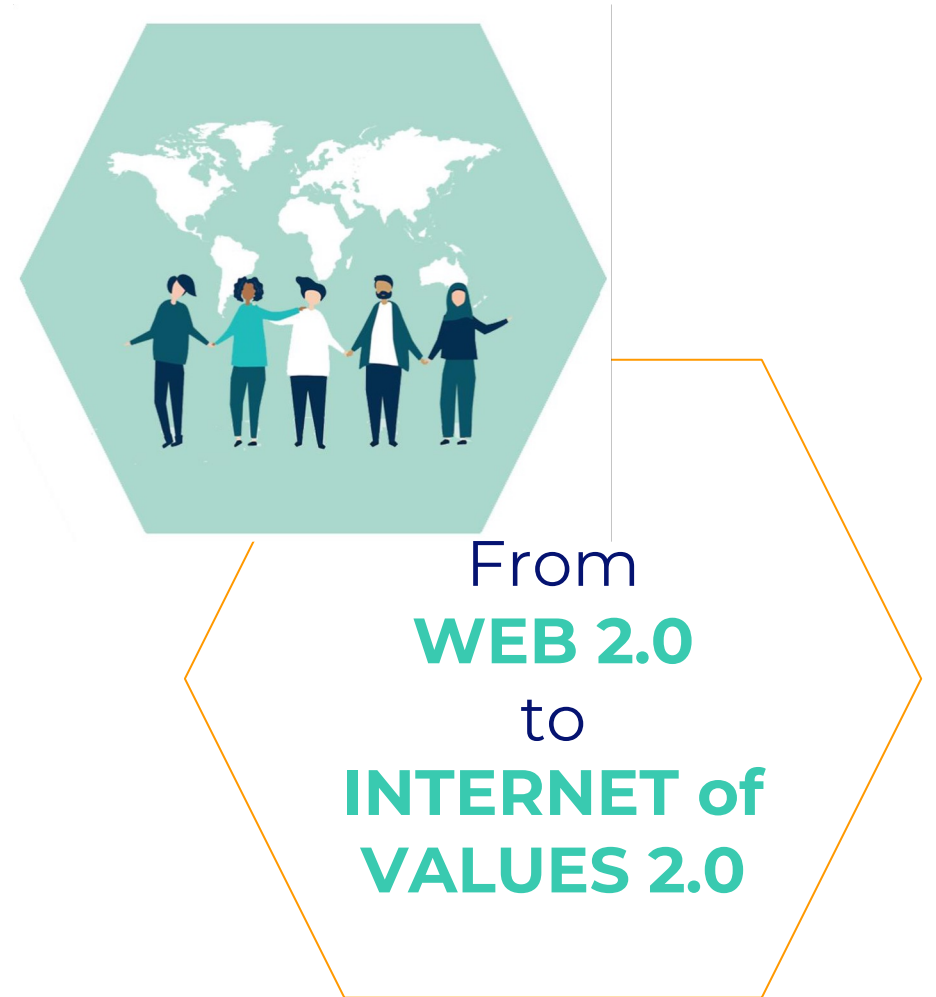
In analogy with the Web 2.0, CommonsHood allows **non-technical users** to **create and distribute** different types of tokens



CommonsHood is designed to democratize local financial instruments to support urban commoning efforts by offering to users a **single wallet Dapp**.



Focused on the **local dimension** through geolocalization (*integrated with the geolocated civic social network FirstLife*)






CL CommonsHood 27

## Describe your Asset

Coins  
 Coupons




My first coin 📄

MFC

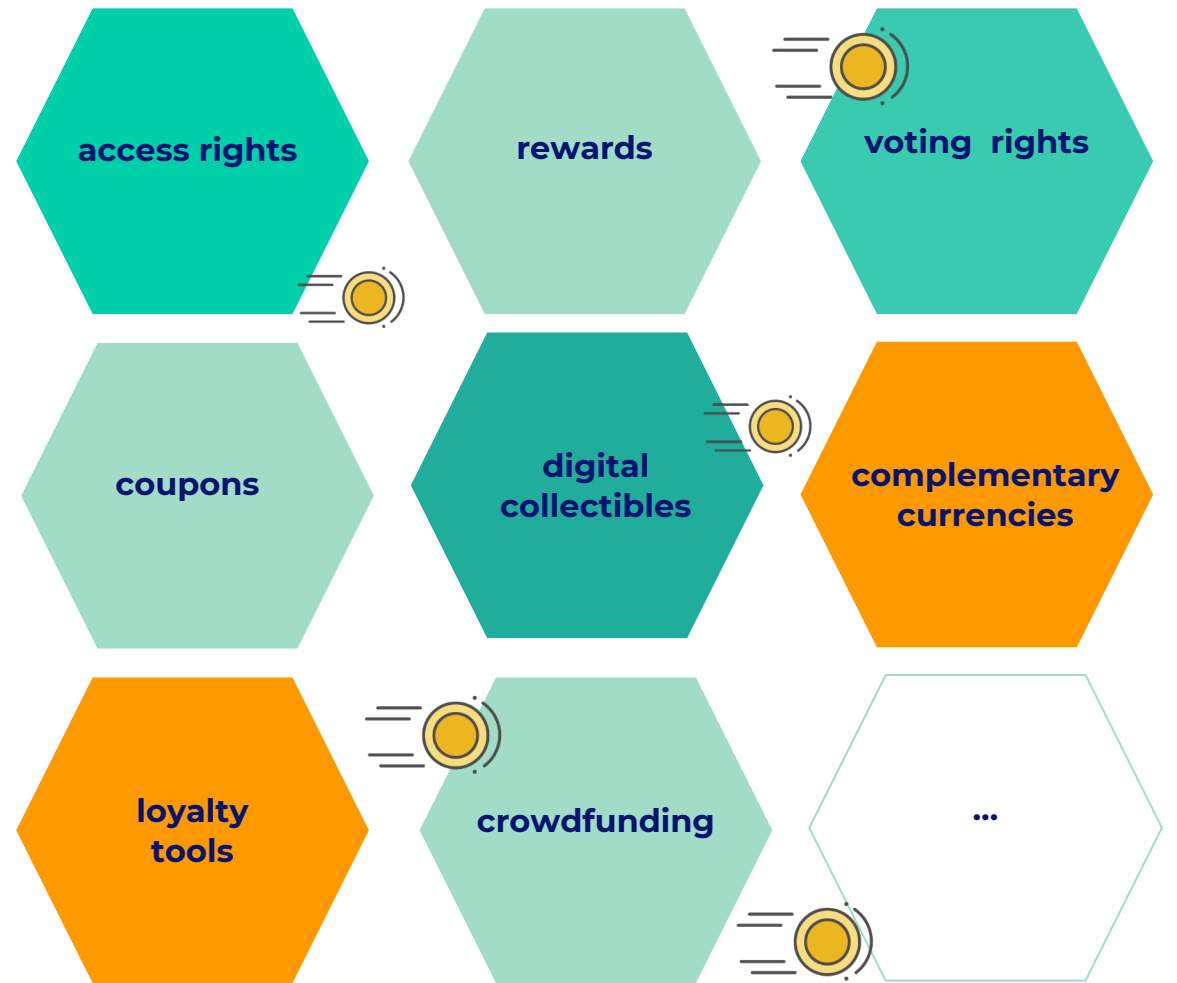
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Short Description

required

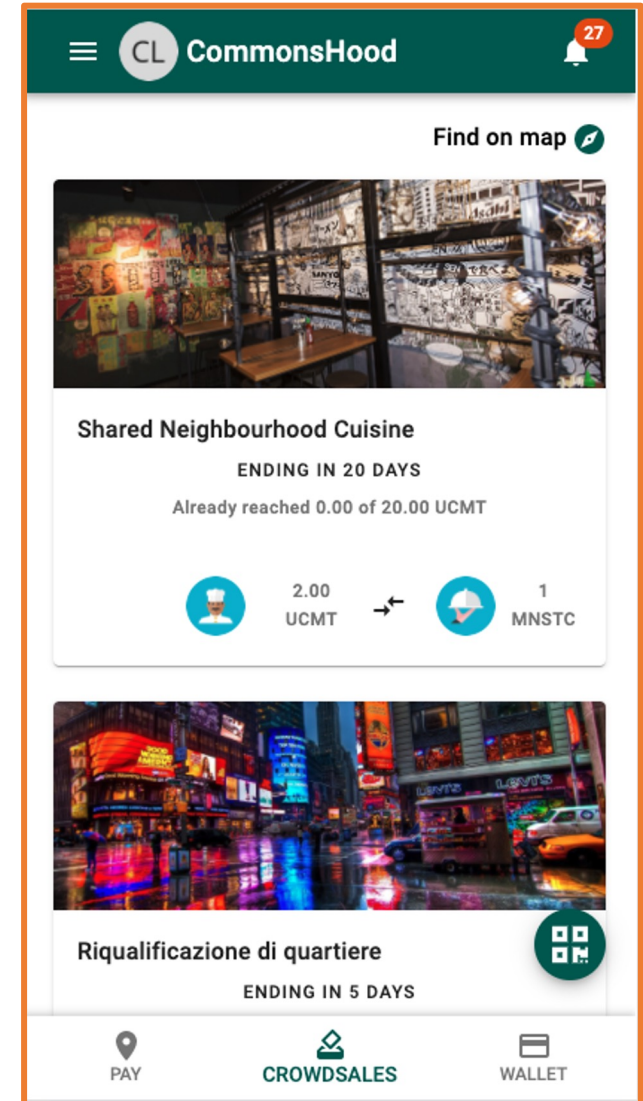
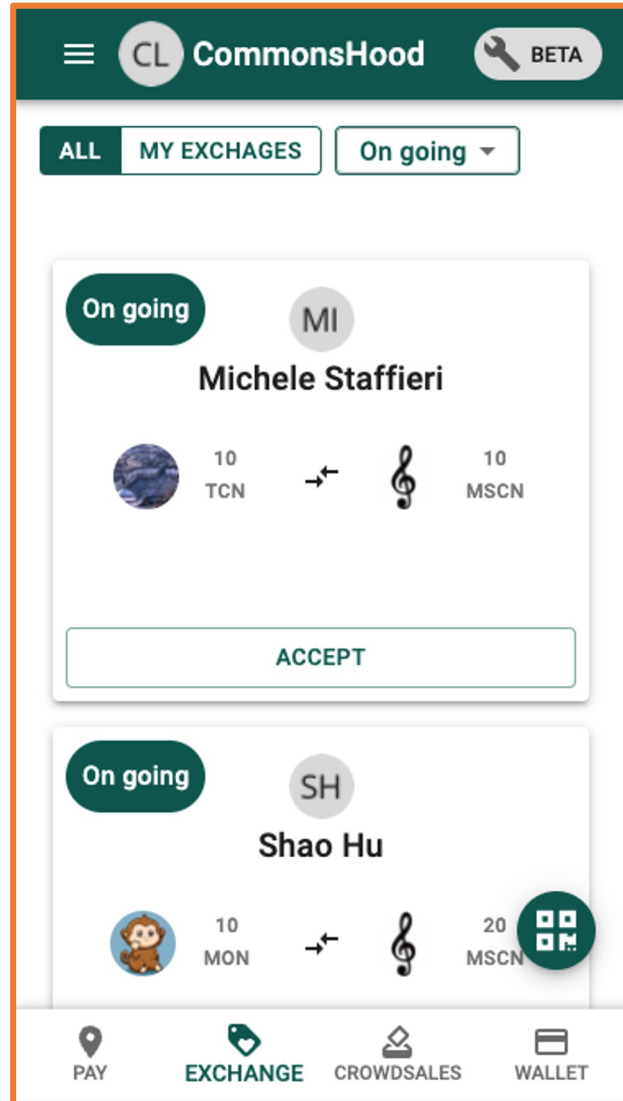
A contract is required - 

**CREATE YOUR ASSET**



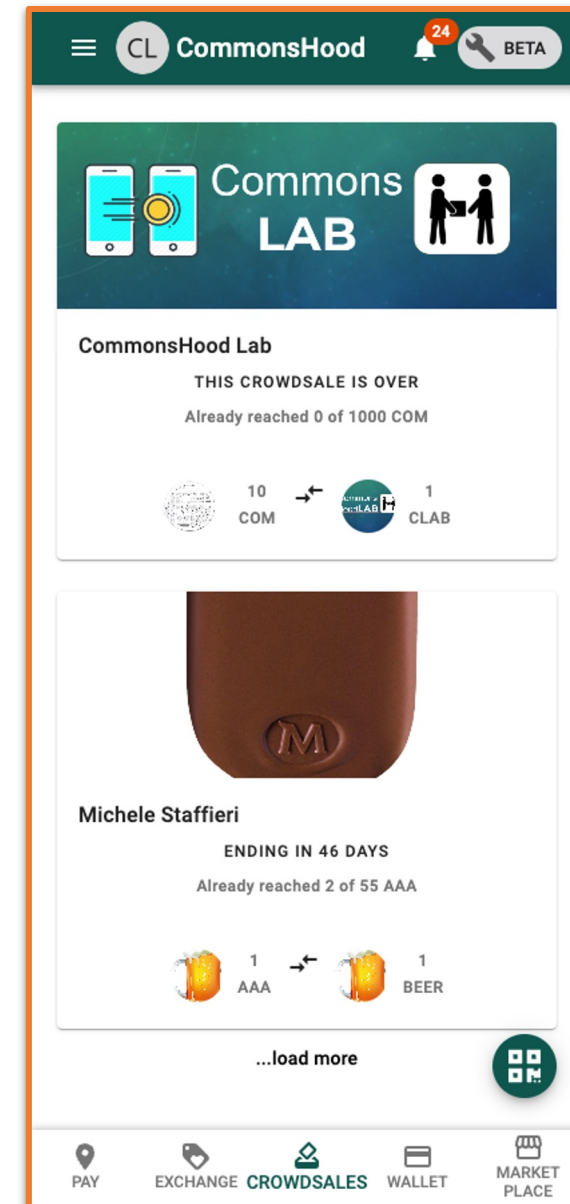
# ASSETS AND LOCAL FINANCIAL INSTRUMENTS

- Coins
- Coupons
- Crowdsales
- Token exchange
- NFT
  - Auctions
  - Marketplace
- “Library of Things”



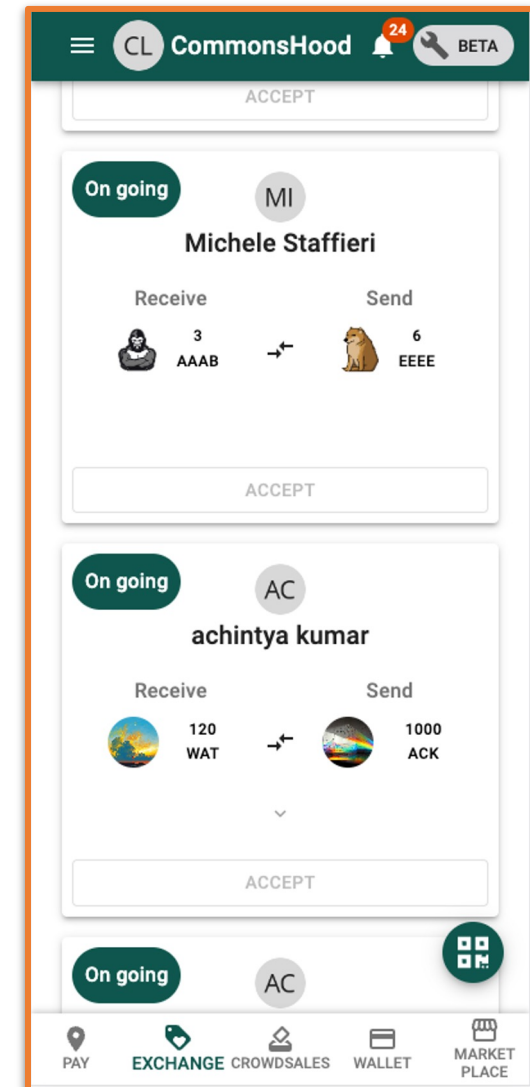
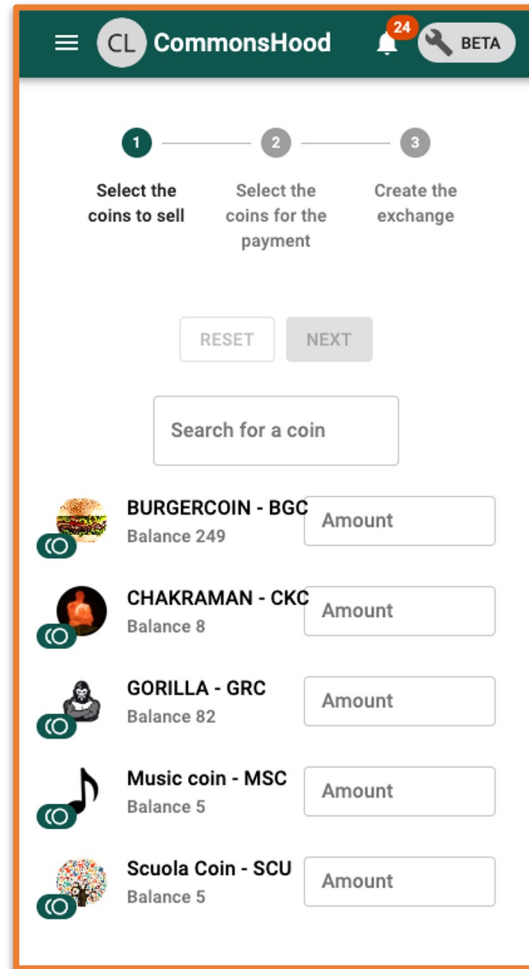
# Crowdsales

- Enable the creation of fundraising initiatives
- Accept a specific token
- Distribute coupons representing the right to obtain a real asset or a service
- Liquid participation



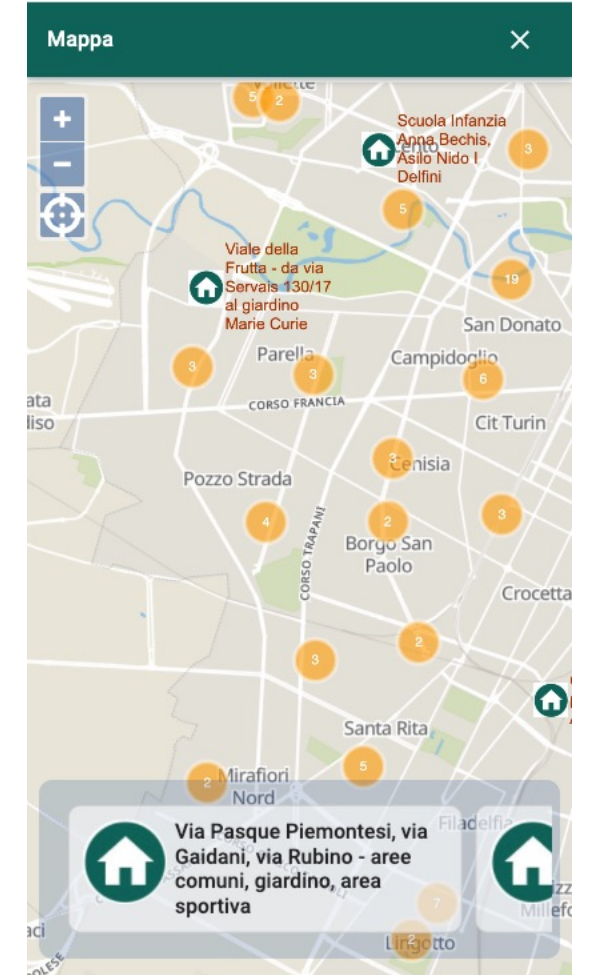
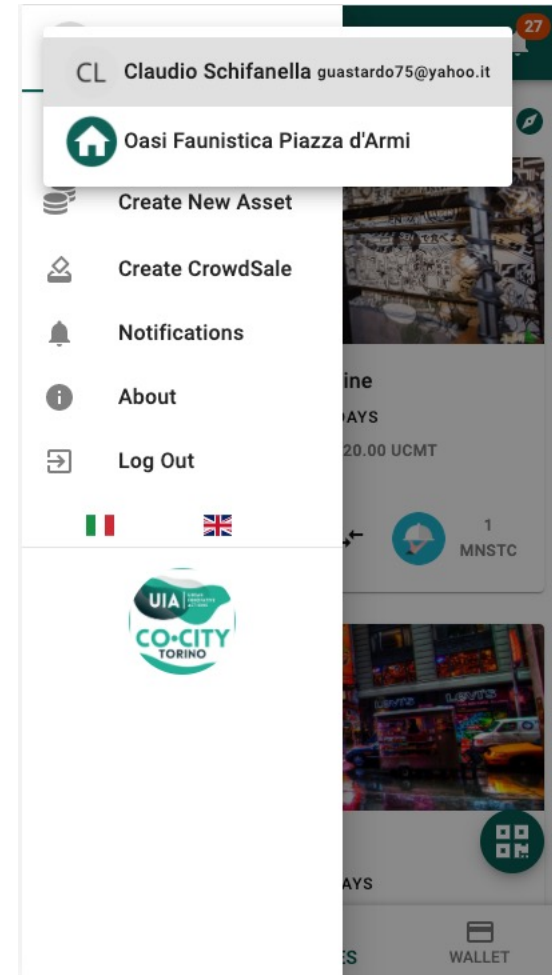
# Token exchanges

- Allow citizen to acquire different tokens to enable the participation to other initiatives
- Based on the order-book metaphor
- m-to-n time constrained exchange pattern



# ACTORS

- Individual users
- Activities (DAOs)
  - Civic associations
  - Neighbourhood shops

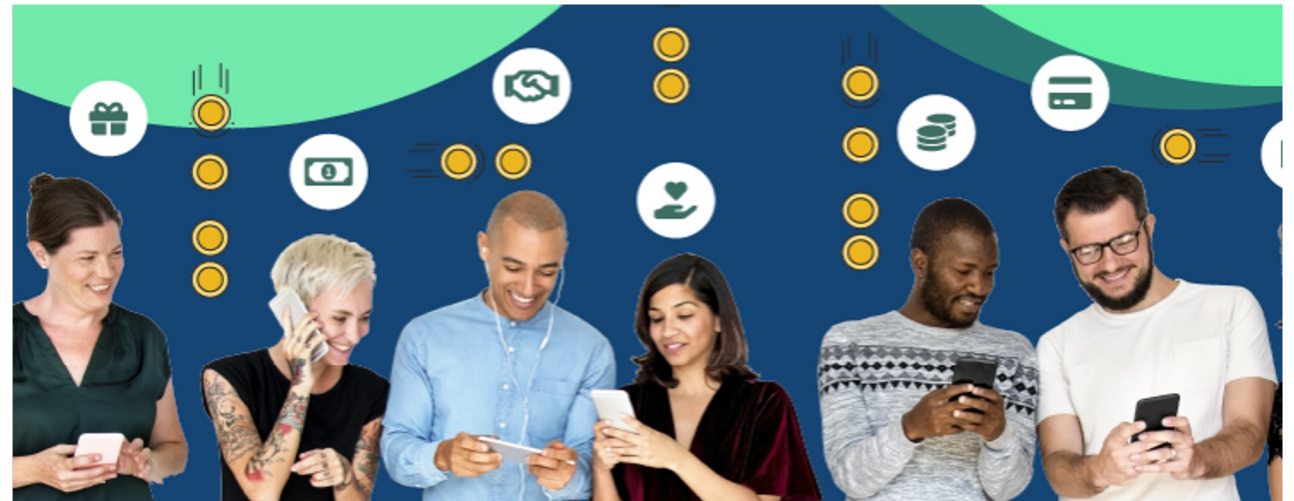


# REWARDS for PARTICIPATION

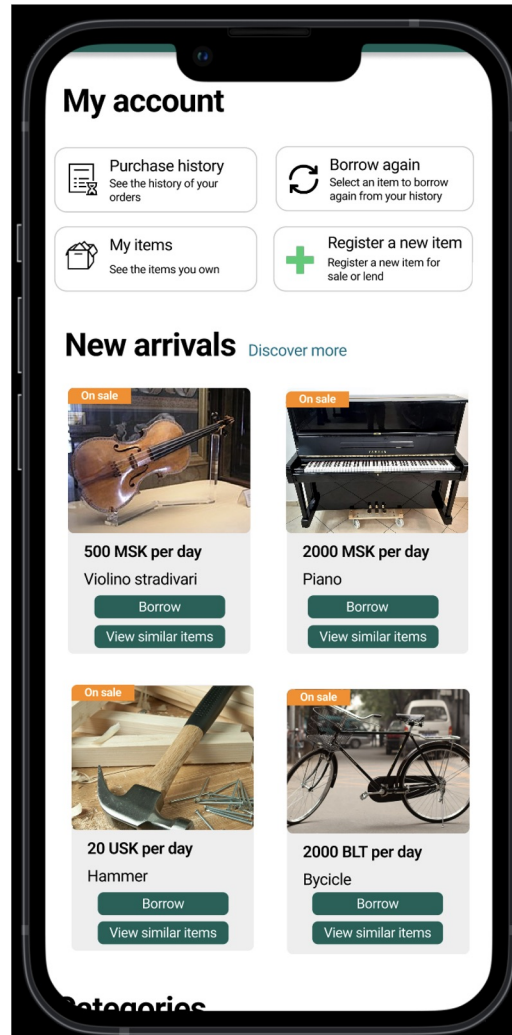


Network of laboratories  
*Civic technologies co-production*

1. The young people of the city of Collegno participate in initiatives of youth protagonism and **volunteering**.
2. They receive **recognition** for their effort (time) in the form of **tokens**, which they can also donate
3. **Local retailers** issue **coupons** that represent **incentives**:
  - discount coupons from local merchants;
  - vouchers for free access to cultural initiatives;
  - hours of use of shared spaces, e.g. music rooms
4. Tokens can be exchanged for coupons, thus **incentivizing the participation** to the socio-economic life of the city.



# LIBRARY OF THINGS



Implements a **loan system of tools**.

The citizen/association

- Creates a **digital twin** of the tool, represented by an **NFT**
- Select a specific token (ERC20) required for the loan

The citizen/association

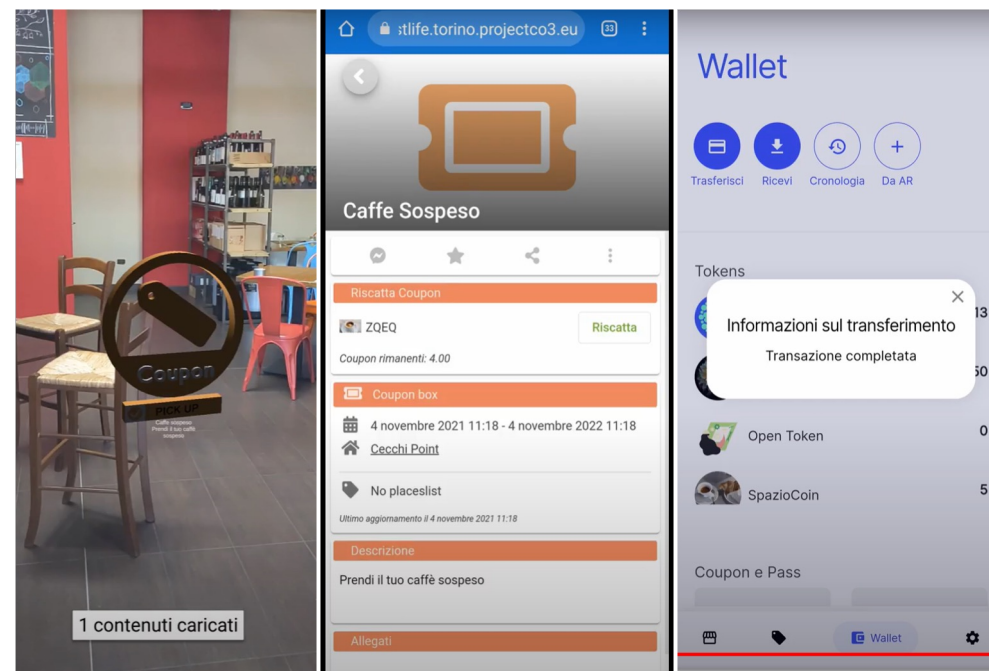
- If it owns the required token, it can proceed to the reservation (remotely) and then the loan (in presence)

The loan ends and the deposit is returned

# AUGMENTED COMMONING AREAS



In the **A.C.A.** people co-produce services through novel forms of socio-economical interactions, enabled by the **CO3 APP** (**AR + Blockchain + Geolocation + Liquid Democracy + Gamification**).



## TURIN PILOT:

- Interaction with **blockchain-based augmented contents**: augmented spaces where CdQ managers, associations and citizens can create and visualize different contents
- Creation of the **House's coin**: blockchain currency managed via a wallet app for making transactions for enhancing the services
- Management of volunteers' activities: AR, First Life and the blockchain wallet used to advertise, manage and reward volunteering activities

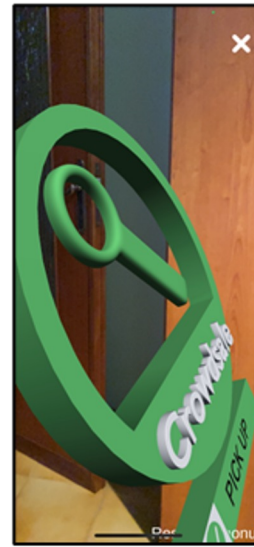




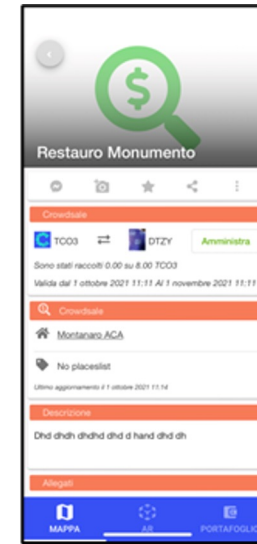
Mobile app



Marker



Augmented Reality



FirstLife



Wallet

# Thank you!

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Deadline: June, 1<sup>st</sup>

Co-Chairs: Barbara Guidi, Andrea Michienzi,  
David R. Matos, Claudio Schifanella