CIVITAS Handshake

Integrating micromobility into a MaaS service

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MaaS - crossing (modal) borders @Polis

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5T - Who we are

5T is a local government-owned company aimed at supporting the local authorities in the governance of smart and sustainable mobility

5T is totally owned by local authorities, its shareholders are:

5T coordinates the local strategic programmes aimed at enabling the Mobility as a Service (MaaS) paradigm in an open eco-system for the urban and metropolitana area of Torino and for the whole Piedmont region

Introducing MaaS

MaaS is the integration of, and access to, different transport services

- In **one single digital** mobility app

- Offered **on a single platform** which integtates multiple features and with a single payment system

- Personalised accessible **on demand**, able to meet any mobility needs

- Able to offer a **real alternative** to a car ownership

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MaaS levels of integration

Mobility as a Service

Levels of integration | Benefits and goals

4 Integration of societal goals
Policies, sustainability, incentives, etc.

3 Integration of services offered
Subscription, bundling, contracts, etc.

2 Integration of booking and payment
Single trip – find, book, and pay

1 Integration of information
Multi-modal travel planner, price information

0 No integration

Source: 5T 2019 (based on the conference paper ''A topological approach to Mobility as a Service…'', Jana Sochor et al,, 1st ICOMaaS Tampere, November 2017)

What if?
What happens if we do not govern the change?

**MaaS ARRIVES
IN A LACK OF RULES AND
IN A LOGIC OF PURE MARKET**

**PUBLIC GOVERNANCE IS
FORCED TO FOLLOW THE
MARKET**

**LOCAL PUBLIC TRANSPORT
AND OTHER MOBILITY
SERVICES RISK TO BE
«PLATFORMED»**

**USERS ACCESS TO NEW
SERVICES AND BECOME
CUSTOMERS OF
THE MaaS OPERATORS**

What if?
And if we do something...

Public governance defines the **rules of the game**

The local system is more **attractive** to MaaS operators

Public Transport is more protected and driven in this **digital transformation**

Users feel **more confident** about personal data and privacy concerns

Public governance is able to define **policies** and to reach societal goals and **sustainable mobility**

1st MaaS project
in City of Turin area

CITTA' DI TORINO

INMOVE

TECNOLOGIE
TELEMATICHE
TRASPORTI
TRAFFICO
TORINO

Technology is a mean and not an end...

IMOVE Living Labs – *Turin goals*

WHO?
- ⇨ Test MaaS services with **employees** of a **private company**, to be selected by a call
- ⇨ Involve the **citizens** of Turin in the LL

WHAT?
- ⇨ Test a MaaS platform and its innovative features **in a real context**
- ⇨ Experiment with an incentive mechanism for sustainable mobility, co-designed by the City of Turin

WHY? WHICH OBJECTIVES?
- ⇨ **Reduce** the use of private vehicles on systematic employee journeys (work at home and work)
- ⇨ Increase the use of **public transport**
- ⇨ Start using a **MaaS platform**

HOW?
- ⇨ Activating a trial with employees and citizens, involving them encouraging more sustainable mobility behaviors

Turin Living Lab – *Two pilots*

TURIN LIVING LAB

GM COMPANY IN TURIN (now PUNCH GROUP)
- automobiles engineering center
- **+700 employees**
- two office sites (5 km away from each other)

EXPERIMENTATION GOALS
- testing MaaS on home-to-work trips – H2W (journeys paid by the employee)
- testing MaaS on work-to-work trips – W2W (journeys paid by GM)

TECHNICAL REQUIREMENTS FOR EMPLOYEES
- having a NFC-on-board Android smartphone
- owning a credit card (all the GM's emplyees have a company credit card linked on their personal bank account)

CITIZENS OF TURIN
- some dozens of users selected by invitation from:
- mobility operators
- interested in MaaS and alternative forms of mobility
- technology and change management experts

EXPERIMENTATION GOALS
- testing the service with few but highly **qualified users** who could provide **qualitative feedback**

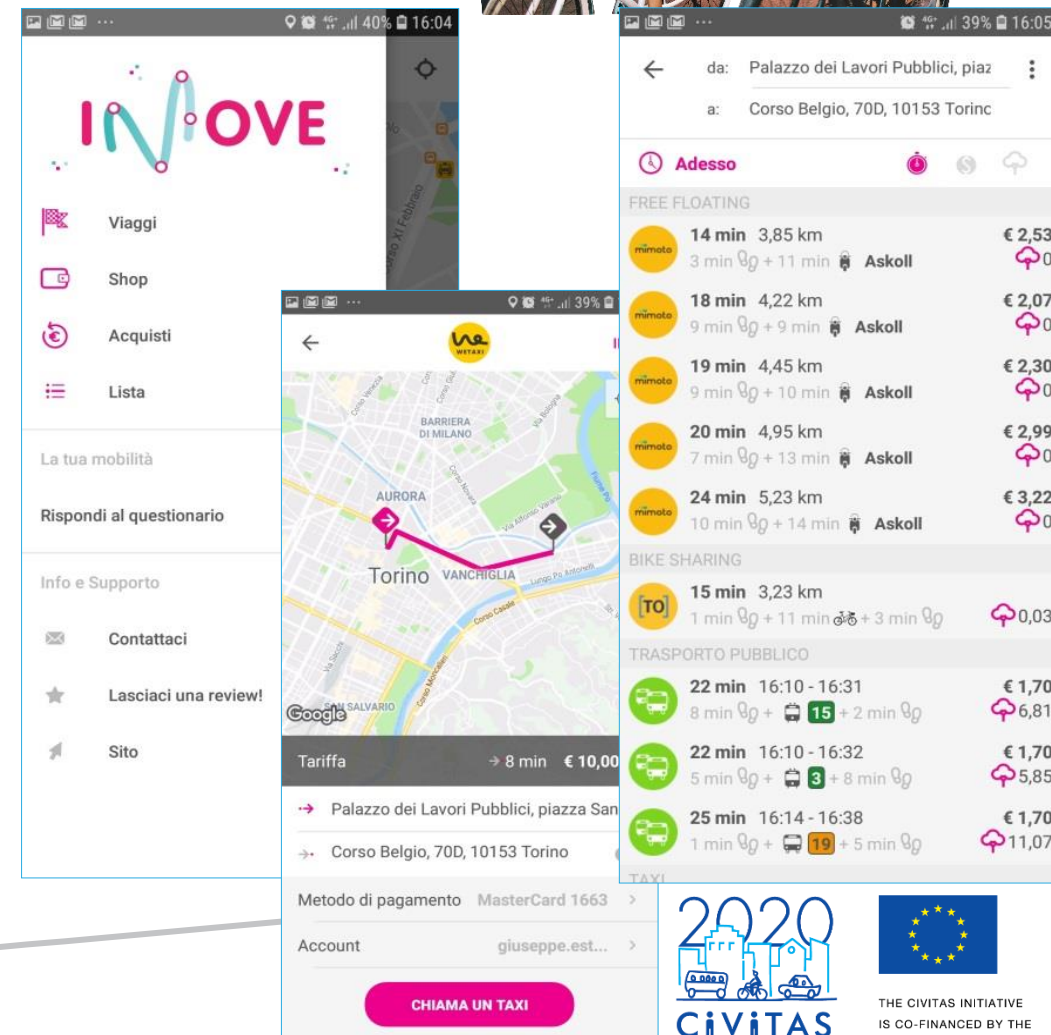**TECHNICAL REQUIREMENTS FOR CITIZEN**
- having a NFC-on-board Android smartphone
- owning a credit card

Turin Living Lab – How we did it

The IMOVE app used during the Turin LL is a custom version of URBI app that provided:

- **Planning**, **booking** and **payment** (and **validation** for PT) for the following mode of transport: urban PT, bike sharing, taxi and e-scooter [**MaaS level 2**]

- Collection of anonymous and aggregated **data on users regarding usage of the app**, mobility choices, km travelled; [**MaaS level 4**]

- Wallet an "tree points" **gamification** schema (10K euro total prize amount) [**MaaS level 4**]

Turin Living Lab – *What we obtained*

Bike sharing TO BIKE	Public transport GTT	E-scooter sharing MiMoto	Taxi (sharing) WeTaxi
+ 58% trips	**+ 34% trips**	+ 6,5% trips	+ 1,5% trips
14 min av.	30 min av.	10 min av.	4 min av.
4 km av.	8,5 km av.	3 km av.	10,5 km av.
34 kg CO2 saved	**36 kg CO2 saved**	2,5 kg CO2 saved	0 kg CO2 saved

Turin Living Lab – *What we learned*

1. **MaaS applications have the fundamental role to convey the culture of multimodality, both to the customer and to the operators.**

2. **Transmitting to the users the perception of economic advantages that could derive in the use of MaaS applications it's one of the keys to success**

3. **An efficient public transport becomes desirable and facilitates the multimodality.**

4. **Before to be ready to MaaS subscriptions or MaaS bundles we can consider Pay-as-you-go or Pay-per-Use models complementing existing subscriptions (f.e. people that already have a PT subscription and wants to integrate it with other mobility opportunities)**

Buoni mobilità – How to go over IMOVE

Testing of "mobility vouchers" based on Italian Environment Ministry founds (183K euro)

Evaluation period: 12 months

Recipient subjects: citizens that renounce to the private car (sold or wrecked), 100 financed with mobility vouchers and 1.000 more that will pay the service by themselves

Primary goal: to test MaaS bundles [MaaS level 3] ideated by the administration applying governance policies [MaaS level 4]

Buoni mobilità – *Status*

The operations of the project were delayed cause the pandemic and the restrictions to people movement defined by the Italian government. We are waiting for more information to plan a new date of start.

We selected the operator that will provide the MaaS service: it's MyCicero, an Italian company that is currently providing a lot of level 2 MaaS services in other regions of Italy

The City of Turin is ready to start the tender for the citizens that want to apply for the experimentation

We are integrating into the MaaS platform 15 transport operator: public transport (1), car-sharing (1), car rental (1), taxi (1), e-scooters (6), bike sharing (3), e-moped (2)

Buoni mobilità – Integration issues

Not all the operators are ready to integrate with a MaaS operator

- Readiness to integration in descending order

    - **micromobility**

    - taxi

    - car rental

    - car sharing

    - public transport

- Major issues in in descending order of severity

    - finance exposition (cash flow)

    - exchange standards missing

    - legal and insurance risks

    - users data management

    - commercial agreements

2020

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Why sharing micromobility is easy to MaaSify?

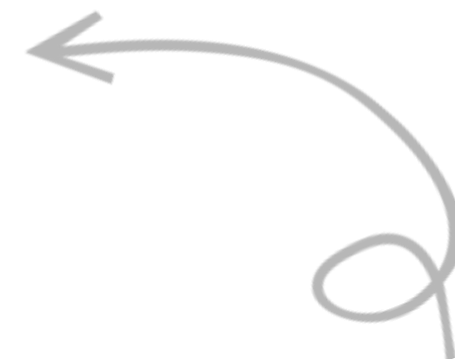Openness to collaboration

New services need users

Worldwide companies, MaaS is growing everywhere

Digital updated

Stable exchange standards (GBFS, MDS)

Low budget asset, low loss risk

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Thank you!

If you want to learn more, please contact me:

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