Co-designing a persuasive app promoting a less car-dependant community
Introducing the Bellidea living lab

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Our Mobility Lifestyle

And yet... a number of alternative mobility options are available
Why not walking, going by bike or using public transport?
How can we encourage people to engage in more sustainable mobility choices, reducing individual car use?
In Bellinzona city managers have been devoting considerable efforts for new cycling infrastructures, low speed zones and improved bus/train inter-changes.

However, such structural and regulatory tools are not sufficient to make a change.
Changing our daily patterns seems impossible.
Comfort
Flexibility
Social distinction
And many other reasons
City managers opted for exploring a new approach, combining transport, social sciences and Information and Communication Technologies (ICT) competences.
Can we stimulate a change in individual mobility lifestyles by providing individual information feedback, social comparisons and tangible prizes, by means of a smartphone app?
Main limitations shown in a similar project we had run in the same area:

preaching to the converted

high drop-out rates and early abandon
To overcome them, together with the city, we opted for:

- tangible prizes (extrinsic motivational factors) targeting “mainstream citizens”
- opening up the design of the app main features to the citizens themselves
Instead of being appointed to external expert companies, (traditional expert-lead, top-down approach), app development turned into a bottom-up participatory, community-level activity
Avoid external experts driving a one-way learning process, by defining ‘their problem’, providing ‘their knowledge and technology’, and preparing ‘their solutions’.

Participants are not just app testers: a user-centered approach favours their empowerment and assimilation of the knowledge developed during lab meetings, so that they can transfer it to future users.

Intrinsic motivation
Learning
Knowledge creation and sharing
In early 2017 the City of Bellinzona invited citizens to join a living lab process, aimed at co-designing a smartphone app promoting sustainable mobility patterns.

We aimed at large social inclusion, to favour later large-scale adoption of the app.
Seven monthly Lab meetings were held, the Bellidea app was designed and then developed.
The Bellidea app tracks users’ routes and gives them a feedback on how and how much they move.
Bellidea encourages users to take part in individual and collective challenges

*Nights out by slow mobility*: walk or bike when you go out in the evening

*No car in peak hour*: do not drive during morning and evening peak hours

*The public transport and folding bike week*: do not use car for a whole week

*Treasure hunt*: group quests across the city without cars
Bellidea encourages users to compare their performances with friends and other participants.
Bellidea provides points, depending on how users move and which means of transport they use. Points can be redeemed for real life prizes, offered by the city itself and a network of local shops and activities.

A virtuous circle for local economy!
And it also creates an open communication channel between the citizens and their city.
Bellidea was launched to the whole population of the City of Bellinzona in late April 2018.

Around 600 citizens registered on the app and around 180 of them regularly used it for at least 6 weeks each. At the end of July it had to be temporarily stopped, due to Moves sudden discontinuation.
Preliminary data show Bellidea was able to attract “average” citizens

Comparison between the “Bellidea baseline” (first two weeks of app use, when limited feedback and no points were provided) and data of the Mobility and Transport Census.
No dramatic “drop-out” trend was seen
The City will also get a large number of data on individual mobility patterns, to inform future land and transport planning and policy-making activities.

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<tr>
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<th>Tutti gli spostamenti</th>
<th>Spostamenti per lavoro</th>
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<td>Piedi</td>
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<td>35.6</td>
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Legend:
- Automobile
- Bicicletta
- Treno
- Autostrada
- Pedonale
- Autobus
- Auto elicottero
- Altre voci
A web-portal will be created to publicly share the data gathered.

Open discussion meetings are envisioned, thus supporting the design of future mobility scenarios.
City decision-makers initially mainly perceived the Lab as a technology innovation testing ground

Focus on app development (practical, technology oriented, low-conflict topic) favoured Lab acceptance by decision-makers
Later on, discussion in the Lab is upscaled to policy-related topics regarding future mobility scenarios.

Potentially scaring, far-reaching and conflicting discussions are spontaneously introduced in the Lab with the support of the institutions.
If the whole Bellidea approach proves successful, the City will be endowed with a new set of governance practices applicable to future decision-making processes in other fields than mobility.

The final outcome of the Bellidea living lab is much more ambitious than just developing a new app!
Thank you for your attention!

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Bellidea is performed within the SmarterLabs ERA-NET European project, funded for Switzerland by the Swiss Federal Office for Energy.
46 citizens answered the call and joined the Bellidea living lab

- Means of transport used (% of participants)
  - Neither car nor motorbike: 9%
  - Car or motorbike: 27%
  - All means of transport: 64%

- Means of transport owned (% of participants)
  - Neither car nor motorbike: 7%
  - Car or motorbike: 16%
  - All means of transport: 77%

«Preaching to the converted»?
Inevitably, such activities attract environmental aware citizens. To also raise the interest by «mainstream» car drivers, Bellidea relies on tangible prizes.