Capacity Area B2 Topic 1.1 Deliverable 1

Updated functionalities of the GoEco! Updated software and documentation

Task B2.1.1: Development and large-scale testing of smartphone applications aimed at tracking mobility patterns and nudging behavior change

A new version of the *GoEco!* app was developed, which both improved already existing functionalities and introduced a number of new ones. The new app is called Bellidea, since it was developed within the corresponding living lab process.

Bellidea kept relying on the same tracker for basic mobility data, namely the Moves application. Improved algorithms for automatic detection of the transport mode were developed, which allowed to reduce the need for validation of the transport mode. Validation is now in fact only requested for 8.8% of the trips. For the remaining trips, average accuracy of detection of the transport mode is around 84.5%, which is slightly above current accuracy performances of other existing apps.

Another innovation lies in the introduction of motivational factors exploiting social norms and interactions, in the shape of "collective challenges". They are periodically launched in order to reactivate already existing users to increase app use and to recruit new users among the citizens and request all app user to adopt specific mobility patterns to reach a collective goal within a limited timeframe.

Finally, extrinsic motivational elements were included, by means of points that can then be redeemed for real prizes, offered by the City of Bellinzona. The metrics to attribute points is the following one: the higher the weekly percentage of travelling time spent on sustainable transport modes (walking, cycling, bus and train), the higher the weekly points that users can collect. Engaging in challenges provides additional bonus points, as well as performing specific mobility choices, such as using the bicycle in the winter.

The Bellidea app was co-developed with around 20 interested citizens, who contributed to testing activities as well. It was then launched to the whole population of the area of Bellinzona on 27 April 2018 with a press conference. It has been downloaded 721 times and has been actively used by 427 users (if we only consider users with at least one week of data).

The Bellidea app (currently with limited functionalities) is available for download in the app stores at the following links:
- iOS: https://itunes.apple.com/us/app/bellidea/id1300193040?ls=1&mt=8
- Android: https://play.google.com/store/apps/details?id=ch.bellidea.app

Outlook

Due to the unexpected discontinuation of the Moves app by their owners (Facebook) at the end of July 2018, Bellidea had to be temporarily suspended. The app is currently working under limited functionalities. We are therefore currently working to find a suitable alternative tracking app to replace Moves, by considering current research and commercial tracking apps and by exploring possibilities to develop our own app.