



Multipurpose User Engagement Tools

Available on
different kind
of Mobile
Apps

For example

Toscana
Where
What.....
Km4City



Toscana in a
Snap



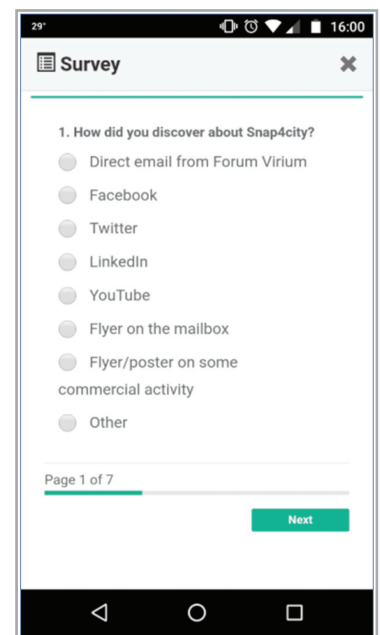
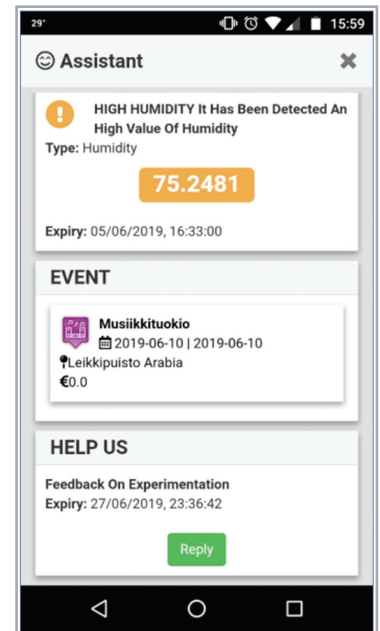
The User Engagement is one of the main challenges in the Smart Cities. Most of the smart applications imply some involvement of the city users, or at least the evidence of their success can be measured in terms of the city user appreciation and reaction to the proposals performed via Mobile Apps.

Therefore, most of the cities need to communicate to the city users and to assess their reactions for different purpose. The communication is the first step, the real need is the User Engagement, which means to efficiently and deterministically obtaining reactions and evidence once the city user is

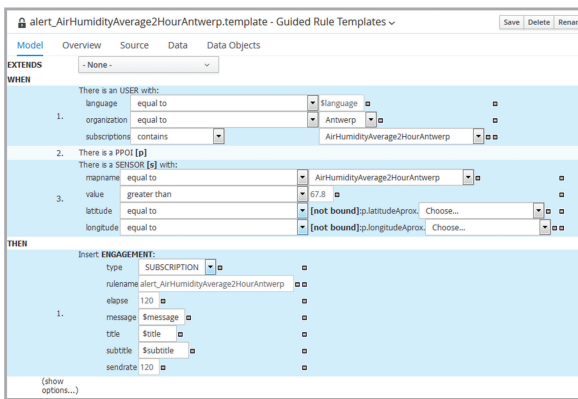
- informed via a messages, for example about the closure of certain streets;
- involved by providing back comments and opinions on specific aspects (answering to questionnaires), in a participatory manner, for example, to get suggestion about the a moved bus-stop or changed service;
- engaged by performing specific actions, for example providing explicit comments, suggestions, taking pictures, raking, etc., on specific topics according to their context.

The city users can be efficiently engaged only if the message arrives at the moment and in the locations in which the request has a sense. For example, suggesting to a commuter that is taking the private car every day to go from home to work, when a simple alternative based on public transportation is possible, inform the commuter in advance that his typical parking slot is not available, remind at the city user that is parking in area which is reserved for other kind of resident users.

In most cases, when the engagements are sent to stimulate a change in the habits or to inform the city user, some incentives/bonus could to be provided to increase the acceptance and attraction. The incentives can be in the form of discount, points, awards, etc. Moreover, they can be assigned on the basis of specific rules, for example, when certain context or user behaviours is detected (for example, when the system understand that the user is moving with a private car), or when the change of habits has been verified (when, after to have received a suggestion, this has been accepted, for example, leaving the private car, and taking the bus).



All these approaches can be implemented in the Snap4City Engagement tools which include:



- A tool to easily formalize Conditions at which Actions has to be performed, such as: release of incentive, change of status, assignment of points, etc.;
- An engine for real time and automated estimation of Conditions and Actions, which is also capable to verify if the message has been received by who, where and when;
- A set of Mobile Apps in which those engagements can be received to engage

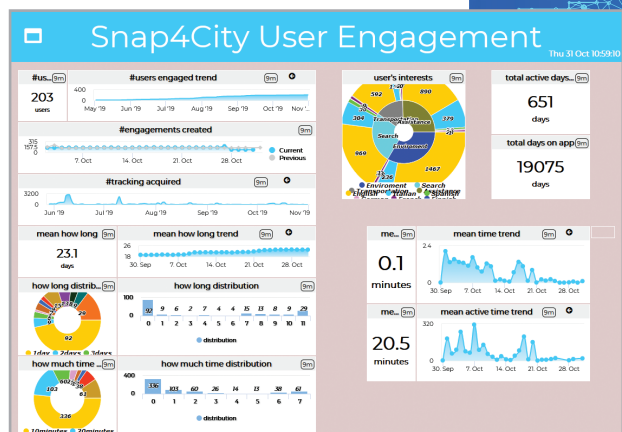
**Flexible
Estimation of
Conditions**

**A range of
Actions**

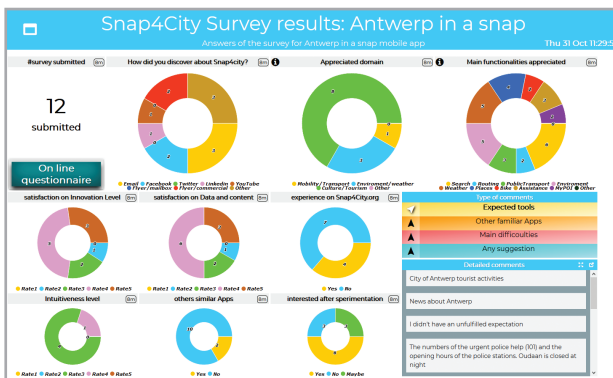
the city users; the same Mobile App can be used to collect data regarding city users movements, preferred points and topics of interest, etc.;

- A Management tool for controlling the Engagement status, which exposes Dashboards for real time monitoring of the Engagment process.

The users of the App may use the App as anonymously or by registration providing or not a signed consent according to GDPR. The collected data are treated according to GDPR. The most relevant data analytics collected from the App are related to the: preferred places of the users, origin destination matrices, trajectories, user behaviours, comments on services, images on services and new POI, ranking and appreciations, etc.



**Real time
Monitoring of
Engagements
and
Provided
Surveys**



The App is a tool for the users for collecting their personal data which are located at their exclusive disposal on the Snap4City platform according to GDPR. They can save trajectories, personal usage, etc., and exploit those data with IOT data of the city or of their personal private IOT devices for creating IOT Applications and personal Dashboards. This allows creating a

participatory community and a group of active city users which can contribute to the day by day activity of the Living Lab.

The above solution can be tested on Tuscany region, Antwerp and Helsinki downloading and installing the Mobile App from Google Play and Apple store. The City Operator may control the Engagement and monitor the results by using the above presented tools, such as the Monitoring tool and Dashboards reported.

Extended version accessible from: <https://www.snap4city.org/548>
Contact: <https://www.snap4city.org>
Partners: ATAF, BUSITALIA, CCTNORD