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EUROPEAN LANDSCAPE CONVENTION
CONVENTION EUROPÉENNE DU PAYSAGE

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NINETEENTH COUNCIL OF EUROPE MEETING
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"The implementation of the European Landscape Convention at local level: local democracy"

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WORKSHOP 3

"Giving Value to Landscapes, wherever you go": boosting participation to landscape management with a smartphone

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Background

For implementation successfully the European Landscape Convention at local level some modern tools may be needed for improving the participation of the general public. This topic was briefly touched in the first day of the Brno workshop. We may need some modern tools that have potential to improve the insights of administrations into citizen perception and valuing of landscapes.

We all carry smartphones. Perhaps now is the time to harness the full power of smartphone technology - for the better participation of the general public for landscape protection.

Problem

Today, a huge amount of information is available on environmental issues such as pollution, water and air quality, deforestation, climate change etc. However, there is a gap between the possession of environmental knowledge and environmental awareness. Even though people know a lot about all the problems, still the state of the global environment is getting worse. Typically, all this environmental information is perceived as overly technical, people cannot understand it and do not know how to act wisely. Knowledge is important, but not the only element of people's environmental awareness. According to some recent studies, motivation to act is even more crucial factor of environmental awareness (Harju-Autti 2016). Thus, for boosting people's motivation for local participation, there is a need for a new approach, turning from an externally focused to an internally focused one – towards people's minds and perceptions. Unfortunately, today there does not exist a global, real-time data collection of quality of the local environment on an individual on a small scale – from people's own perceptions. The solution introduced here aims to fulfil this gap.

Solution

The solution is a mobile application for assessing the state of the environment as perceived by people. The goal is to develop an application that enables people to evaluate their surrounding environment in the same way as, for example, hotels are evaluated by customers. This solution is built on well-established, existing technologies: a smartphone app, using cloud computing for web hosting, big data collection, and AI for data analysis.

How it Works: Ease of use is a fundamental characteristic of the app. Just by rating three main sensual experiences – Look, Hear & Breathe via the user's smartphone – this solution collects data using natural human senses. It creates an almost real-time world map of the state of the environment.

Today, there are many innovations based on acquiring environmental information, such as Foursquare, #climate, Ecoviate, Farmstand, and Oroeco. However, none of these innovations allow ratings of any natural environment. This is a grave limitation. We should have a global system that is free to use and allows people to rate any environment via GPS on their smartphone - a very different activity from rating various commercial places.

This solution, called Envirate, was recently chosen as the winning solution for the first international Pentti Malaska Futures Innovation Award, on the grounds that it brings together

environmental responsibility, global futures awareness, and the latest information and communications technology. The jury assessed that the Envirate solution combines visionary thinking, futures consciousness, latest technology and the collective awareness of humankind in building a sustainable planetary future.

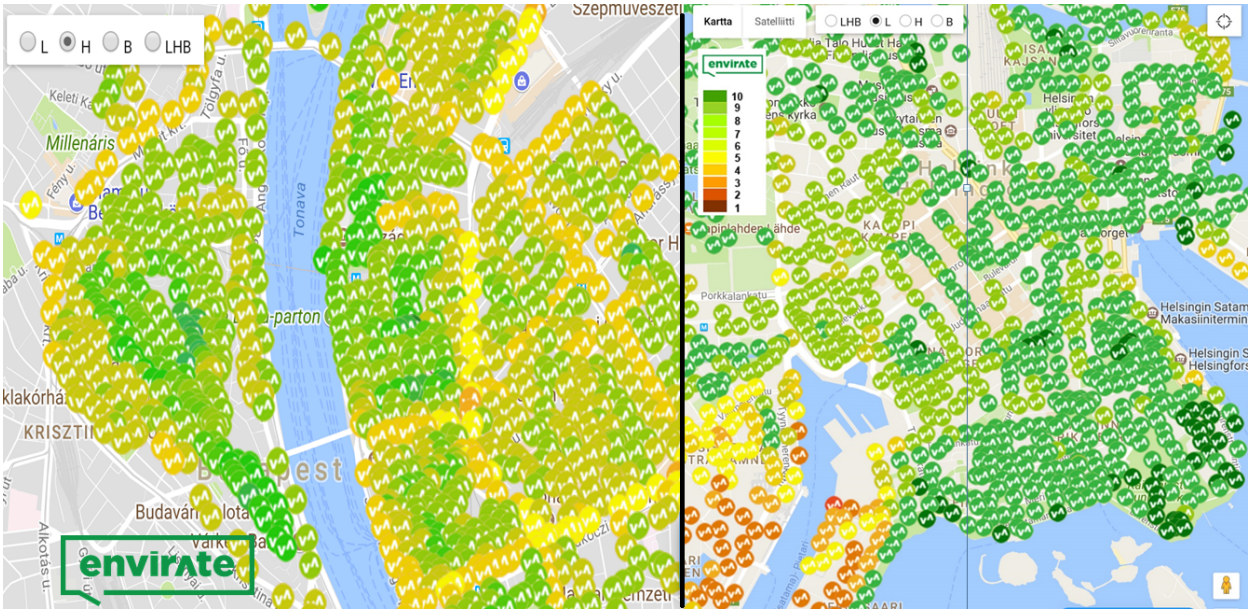
Participation of local residents

In this solution, participation of the general public is achieved via a so-called citizen science approach. Citizen science projects are activities where non-scientists can meaningfully contribute to scientific research. This citizen science approach is well tested and has previously yielded practical and concrete results: Wikipedia lists globally that there are currently 190 active citizen science projects, and SciStarter lists thousands more.

The user can explore and discuss ratings, chat with other users who are nearby and can create their own events, plant trees, etc. That brings improved environmental awareness, improved feeling of belonging to a group and social empowerment. The quality of the generated data itself is checked for consistency algorithmically and compared and weighted with more experienced users, making sure that the data is valid statistically, internally, externally and worldwide. Moreover, extensive game-ification is used in order to motivate people to become known as better Enviraters.

The EnviRate users are typically citizens with smartphones in any country who are concerned about their local environmental problems. The most important target groups are: 1). Environmentally-conscious young people (7-17 years old): these ‘digital native’ people have an instinctive understanding of technology and are more globally aware than any previous generation. They can join the environmental activities, feel the fun and social happenings. In the EU they number about 100M; 2). Environmentally concerned locals: they have a natural, vested interest to monitor changes near their homes. The local environmental activities and groups vary from one place to another, but typically they are dealing with acute emerging local environmental issues – joining these activities will create the social empowerment. 3). Environmentally-conscious tourists: they will get added benefit to their trips via Envirate. When entering a new city, just by clicking one button they see the most beautiful areas to visit.

The solution already works globally. It can be used both in landscape environments and in urban areas. The data that the system provides has been proven to be solid, and scientifically sound. Over 15 000 data points have already been gathered. As an example: Budapest and Helsinki:



Local people's perception of the landscape environment has great potential to become an important element in landscape planning, and political decision-making regarding landscapes. The smartphone solution introduced here is aimed to raise awareness of citizens and stakeholders about the perceived quality of local landscape environments. Moreover, the solution creates a platform where citizens and stakeholders can act together in matters arising from collected information – for example, stimulating a local clean-up day.

To sum up, the solution empowers grassroots change by giving citizens the power and responsibility to rate the state of their surrounding environment, and may improve greatly their motivation to act.

You can try the solution simply by clicking https://m.envirate.net

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