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C³PO DEMOCRATISES CITY PLANNING

Many residents know their cities, towns and villages like the back of their hands. The ITEA project C³PO found ways for city planners and designers to tap their knowledge.

Every week, 3 million people around the world move from a rural area to a city, estimates CityMetric, a news website about urbanisation. Old and new city dwellers are becoming more demanding about the facilities and homes on offer. The ITEA 2 project C³PO decided to use technology to give us all a better say in urban developments. The consortium of 21 partners developed a cloud platform of existing technologies and applications, as well as new products for the smart cities market.

"Cities are becoming huge and design in them is becoming more complex," explains Andy De Mets, C³PO's project coordinator and the coordinator of external R&D and Innovation Programs for Belgian company Barco. "We need to redo the entire cycle of (urban) planning."

Before the age of social networks, town planners would hire architects and builders for new developments and improvements and then consult their voters on the plans once they had been drawn up and a mini model had been produced. But now citizens can be consulted very early on, thanks to new technologies. "That's very helpful because planners can now use their feedback as a guide to make decisions," says De Mets.

Architects, planners, designers and researchers joined together in Brussels and Kortrijk in Belgium, Oulu and Kouvola in Finland and Turkey's municipality of Pendik.

> ***"Citizens often know the place where they live way better than city planners.***

In one trial in Kouvola, citizens gave their views about proposed developments using an interactive 3D map, MapGets, created by FCG City Portal Oy, browsing the map and adding comments into it. Alongside social network product trials, the researchers also ran workshops to collect feedback in groups and in person from residents. They contrasted ways to collect views and data from citizens and to tap into what the researchers termed 'tacit knowledge', a shortcut in a town that is not marked on a map, for example.

"Citizens often know the place where they live way better than city planners who may live in another area of the city," says Ekaterina Albats, postdoctoral researcher at LUT University Finland. "They are a huge source of energy and inspiration for city planners."

A mix of technology companies, ICT service companies, architects and municipalities joined forces with researchers to find better ways for planners and designers to help citizens visualise their vision for developments. Bahçesehir University in Istanbul developed an indoor Augmented Reality application for Android tablets and demonstrated it at Dolmabahçe Palace Museum. As a result of the project, Turkish company ERARGE developed several applications including one, which allows city residents to take a virtual reality tour, experiencing it like a video game, commenting and voting on different design choices.

Turkish software company Mantis developed an outdoor screen that allows local authorities to showcase what people are saying on social media and start conversations with them at public places. Netcad, another software specialist in Turkey, is now commercialising a map-based platform called Netigma, which helps local authorities and designers to analyse data, e.g. how dense traffic is in a town.

Belgian design agency Studio Dott is commercialising a physical booth that can be placed anywhere by local authorities, that want to collect residents' views on a proposal. Even non-tech-savvy citizens like the elderly can easily use the booth, answering questions in it that are recorded for processing using language analysis software.

Barco is also selling the Transportable Cave – a mobile setting that offers companies better immersive virtual reality experiences. Citizens step inside the Cave wearing 3D glasses to see what a developed space would look like.

The consortium is well placed to offer these and other smart city products, a market expected to be worth 1.5 trillion dollars by 2020, estimated consultants Frost&Sullivan. "There's huge potential for businesses that give citizens their voice," says De Mets.

MAIN PARTNER

Barco, Belgium
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TOTAL R&D INVESTMENT

€ 6.5 M

DURATION

December 2014 - November 2017

COUNTRIES & PAs

Innoviris & VLAIO
Business Finland
TÜBITAK

OTHER PARTNERS

Assar Architects, Belgium
Centre d'Informatique pour la Région Bruxelloise
City of Kortrijk, Belgium
Createlli, Belgium
Noesis Solutions, Belgium
Sirris, Belgium
Studio Dott, Belgium
City of Kouvola, Finland
City of Oulu, Finland
FCG City Portal Oy, Finland
FCG Design and Engineering Ltd, Finland
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Playsign Oy, Finland
Tekla, Finland
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ERARGE, Turkey
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