Smarter smaller cities
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Guimarães, Open City Project
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Smart Cities are those cities which are tapping into the growing revolution in digitally-interconnected objects and 'things' to create a place which works more effectively and sustainably, improving transportation, energy, waste management, crime, safety and all those other things which make living in a city both amazing and frustrating.
Smart cities make use of embedded sensors in transport, energy and other systems to create applications and services which make sense of all of the data generated, promoting efficiencies which seek to improve human (and object) interconnections throughout an otherwise complex city.

How might doing this be achieved in a small city like Guimarães?
The notion is that, although smart city systems are being trialled in various major cities around the world, Guimarães has the chance to be a smarter smart city, on account of its size and its character. Can that notion of a smaller, smarter, city be turned into reality?
For Guimarães – a small city in northern Portugal, with just 160,000 people – it might just offer a way forward, but not replicating what other smart cities are doing, but building on its own special characteristics. Guimaraes is sometimes referred to as the birthplace of the Portuguese nationality; it prides itself on the strength of its cultural offer, and in 2008 was ranked the second most liveable city in Portugal. And it is that 'liveability', that very human-focused attribute, which is at the heart of this project.

Working with a group of advisers from across a range of disciplines, this project seeks to bring a new perspective to smart city development – taking as its starting point that sense of cultural pride and historic identity, and to build a smart city system which is human-centred. As one of the expert advisers puts it: "Smart cities will be smart because their citizens have found new ways to craft, interlink and make sense of their own interests".
An edited summary of all of the contributions received from the expert contributors can be found on this page.

Human-centred design
The concept of a human-centred approach to smart city development is not new – indeed, it is an acknowledged and respected design discipline. But it is not very often that a genuinely human approach forms the basis of a whole project over an extended period, rather than just a small part of a technology-focused process.

Usman Haque, writing in a recent article for Wired magazine, elaborates on the theme of human-led city development, and the challenge to be addressed:
"We, citizens, create and recreate our cities with every step we take, every conversation we have, every nod to a neighbour, every space we inhabit, every structure we erect, every transaction we make. A smart city should help us increase these serendipitous connections…
The "smartness" of smart cities will not be driven by orders coming from the unseen central government computers of science fiction, dictating the population's actions from afar. Rather, smart cities will be smart because their citizens have found new ways to craft, interlink and make sense of their own data."

Guimarães open city is a live version of that process – providing a forum through which citizens, businesses, academics, artists and politicians can collaborate to develop new ways of working and living in the city. But talk to people in Guimaraes and an antipathy to technology quickly emerges. People assume that the introduction of 'smart' systems will be at the expense of the 'human'; at worst, there's a sense that any type of change at all can only be detrimental to the centuries-old traditions of a small, ferociously proud, city.

The following film of the city makes this clear.
http://watershed.co.uk/opencity/commissions/commission-3/

The challenge in this sense is not a technology-challenge: developing smart systems and technologies which are human-centred. More, it's about behaviour and trust.
The project is addressing this by developing a set of activities which enable people to talk about and illustrate their resistance. What is that they are worried about? What are they afraid of losing? What is it that they think technology-oriented change might damage? But, at the same time, exploring what it is that is special about their city: what is it that they love about where they live? And what would they like to make better?

The essence of a city
The response to this is best illustrated by the project with the cardboard 'digital nose' highlighted in the above film. This project took something real but ephemeral – and very human – about Guimaraes, and sought to enhance that precious experience. Using a digital device, shaped like a nose, the essence of a city can be transposed and communicated to others.

Being able to share the smell of a city resonated with people eager to capture and retain the sense of 'now'. This project highlighted that embracing change need not be at the expense of the human interaction which is at the heart of this city life.
A related project is illustrated in this link , which outlines how a 'Design Fiction' workshopping process enabled participants to understand the value of working together to create new projects and applications which might add value to what they already love about their city.

Play and resilience
These projects illustrate the very playful way in which people are being drawn into a process of co-designing a set of smart applications and services. This isn't a top-down system but a managed process which encourages experiment – a willingness to try things out; to play; and to show how change can actually enhance what is important about what a city already has. The aim is to get people to design the smart city systems they want – by inviting them to talk about what they don't want. Counter-intuitively, Guimaraes open city is putting these people – the apparent nay-sayers, the 'luddites', the people who appear resistant to change – at the very heart of the smart city project. Placing these people at the centre will make whatever emerges more robust, more resilient and, ultimately, much more fit for purpose.

This paper (Smaller Smarter Cities by Graham Hitchen) has been commissioned by Watershed as part of Open City, a project that is part of the Cidade (City) Programme for Guimarães, Portugal – European Capital of Culture in 2012.

As part of the Open City strand, *Watershed* has curated a series of *artistic interventions* as well as commissioned *think pieces* which will explore the concept of openness in relation to city development. Open City provides the opportunity for Guimarães to establish a leadership role for open city development. It is a knowledge exchange programme that will help to re-draw approaches to city-making and change the ways we plan, deliver services and engage communities.

This work will be both published online and presented in Guimarães, providing the context and the content for a symposium to be held in the city in November 2012.

www.watershed.co.uk/opencity