LETTERS

SMART CITIES RESPONSE

The article *What's so clever about smart cities?* (*Ingenia 50*) captures some key themes in the smart city debate and invites us to think about the practicality of delivery in terms of funding models.

The article highlighted the multiple opportunities for information and communications technology (ICT) to contribute to the operational efficiency of city systems and services. While the application of this technology is extremely varied (from water network management to emergency response capabilities), the core concepts and underlying infrastructure are fairly consistent. They largely comprise ubiquitous sensing, computerised transmission of data and optimisation, which are then used to alter the system through some actuation functionality.

To date, the main focus in the smart city discourse has been around operational efficiency within service delivery. However, we believe that there is a much wider system of value that can be created from the novel application of ICT in the city context. It can be used to drive innovation, not only in the optimisation of existing services, but also in the way we deliver services in our cities. For example, the move to the Oyster card in London has completely transformed how people interact with public transport in the city, facilitating ease of use, modal shift and flexibility. This has real implications for the behaviour, quality of life, and welfare of citizens.

Innovative companies are leveraging data as a core asset to deliver products and services of value to the citizen. For example, one app, *Tube Deluxe* (an iPhone guide to the London Underground which had been extracted from the Transport for London journey planner) has 350,000 downloads and 50,000 active daily users. This not only supports economic development in the city by driving a creative and competitive marketplace, but provides value to the users who are living in the city.

If city leaders are able to understand and articulate the value of ICT investment beyond efficiencies, they will be better equipped to invest appropriately to a wider business case than simply focusing on the 'who will pay' question. They will be able to make a more holistic assessment of the value from smart city investment, and to focus on the purpose of investment, enabling more sustainable financial and commercial models.

Of course, realising this potential requires an incorporation of the complexities of the relationships between citizens, local council operations, privatised service providers, technology infrastructure and many other stakeholders. This will be a key challenge if we are to achieve the aspirations offered by the smart city vision.

Ellie Cosgrave
Smart City Research Engineer, Arup
Léan Doody
Associate, Arup

Contributing authors to *Information Marketplaces: The New Economics of Cities*
http://bit.ly/ubVIDm

This *Nearest Tube* app overlays the name and direction of nearby tube stations (and their respective lines), onto a smartphone's camera image © AcrossAir