Smart cities in Africa require intelligent planning and an active citizenry

Smart cities in an African context require intelligent planning and an active citizenry rather than the overlay of technological solutions more applicable to international markets such as Europe.

This was the message from Paragon Founding Director, Henning Rasmuss, a key speaker at the Bigen Smart City Conference on 9 May in Pretoria. The conference focused on main issues such as harnessing smart urbanism to drive transformation of cities, bridging the digital divide in sustainable development in the information age, and how best to realise urban mobility.

Engineers tend to look at 'smart' cities in the context of technology rollout, whereas architects are more concerned about the social implications of technology. While 'smart' is often equated with 'intelligent', the real issue about technology is whether or not it is sustainable. For example, Rasmuss highlights a simple trend like road closures to boost safety and security in neighbourhoods as having unforeseen consequences in terms of traffic flow and congestion in a larger urban context.

"Cities are made of the people who live in them, and that is why cities differ in terms of the urban experience they offer. Hence in certain cities, you just feel safe walking down the road, because the citizenry contributes actively to making it like that," Rasmuss argues. However, practices such as Paragon have to design for technology, as suppliers make such solutions available to clients, who then demand them in their projects. "We need to be knowledgeable in what technology can offer, as well as ensure that the physical environment functions intelligently, whether for a community in a neighbourhood or a workforce in a corporation."

A key factor in this regard is spatial design, which takes into account dead corners on streets for safety and security purposes, and allowing for transparency, shading, natural cooling and ventilation, and planting such as roof gardens in office complexes and food gardens for housing developments.

"There is a difference between intelligence and knowledge. Intelligence is the ability to manipulate facts for a particular effect. Just as technology rollout does not make a 'smart' city per se, technology rollout plus informed citizens can make for a truly amazing city," Rasmuss stresses.

Rather than look at hi-tech technological solutions first, such as touchscreens for pedestrians, Rasmuss argues that common-sense dictates that the initial focus is to ensure that basic infrastructure functions properly. "We need to look at the most obvious bottlenecks that keep a city from functioning reliably. It means taking a step back in order to look for the most obviously broken bits, before we get into engineering designs and technology."

This practical approach means that architects and developers can focus on the low-hanging fruit, which often means limited or no investment at all in order to bring about a substantial improvement in basic infrastructure. "Before we start buying into and designing around technology, we just need to project good common-sense and long-term thinking into the discourse. We have a responsibility to inform clients when they make short-term decisions," Rasmuss concludes