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# What does the future African city look like?

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31 Oct 2017

What does the future African city look like? How do we identify the impact and trends resulting from urbanisation? What new regulation and governance models are needed? What about engagement models that embrace social inclusion and civic participation?



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These are all questions we need to answer and as 31 October marks World Cities Day - a day to promote successes and challenges resulting from urbanisation – the spotlight is on the future of cities.

The theme this year is 'Innovative Governance, Open Cities' which highlights the important role of urbanisation as a source of global development and social inclusion. Urbanisation provides the potential for new forms of social inclusion, including greater equality, access to services and new opportunities. In fact, it is evident that innovative technologies and connectivity is critical during the planning, design, delivery and operation of smart infrastructure and services.

The internet of things (IoT) is gaining traction, impacting every area of our lives and quickly turning 'smart cities' from intangible visions of the future into a reality. Around the world, cities are becoming more connected, collecting data everywhere to help planners make smarter decisions and deliver new services.

Before Africa is able to start meeting those demands, we need to plan for capacity and speed to ensure a high-quality experience. What's more, we need to take our unique challenges as a continent into account. A robust wireless network is a key part of this preparation – it is the 'glue' that holds smart cities together, enabling effortless sharing of workloads with data centres and bridging connectivity across wired and wireless.

## So, what does the future African city look like?

## Bridging the digital divide

As technology continues to advance at a rapid pace, the vision of the future is still emerging and we have yet to see what a true smart city will look like. Smart city IoT is an evolving concept, with lots of ideas but only a few complete deployments. Wi-Fi is the platform that will provide the foundation for smart city success, as it has immediate applications and can effectively connect a vast range of wireless technologies that will be involved in creating smart cities.

Smart cities will help address the economic and social inequality that this divide creates, by providing internet access to all citizens. With robust networks in place, bridging this divide will help bring communities closer together and encourage citizens to play a more active role to local councils. Flawless connectivity will improve city infrastructure and make it possible for citizens to engage with their community, such as removing the roadblocks that complicate access to local services.

#### **Business**

Revenue-generating applications will transform the way African businesses in smart cities communicate with their customers. In addition to an increased use of digital signage, to communicate offers and promotions, we can expect to see an increased use of beacons, which send notifications to customers' smartphones as they enter a store. It will also transform the way people work and tech-savvy commuters will benefit from smart city technology to work on-the-go.

#### **Smart utilities**

In a smart city, lighting will automatically be switched off when it isn't needed. It will be able to detect when people are on the street and turn on and off accordingly, reducing energy waste which is critical in countries where power is scare or expensive. In the near future, we can expect to see more city planners equipping their streets with smart lighting that uses sensors to track when there is high or low public footfall which will go a long way to reducing usage. Future smart traffic management is also likely to be a core feature of smart cities. This includes centrally controlled traffic sensors and signals automatically regulating the flow of traffic in response to real-time demand, with the aim of smoothing flows of traffic to reduce congestion. This can go a long way to reduce traffic in high-dense areas over peak times like Sandton for example. And just think about the possibilities it could offer cities such as Lagos or Nairobi.

New technologies will also play an important role to help cities of the future promote sustainable energy use. For example, 'smart bins', that alert collectors when they need to be emptied are being used today and we can expect to see more of them crop up in cities across the world as they embrace smart technology.

However, before becoming truly 'smart', cities need to implement the networks that will enable them to deploy new technology and the opportunities that Wi-Fi presents are simply too significant to ignore. The likes of Kenya, Nigeria, Zambia, and even Zimbabwe to name a few have embarked on wireless initiatives designed to bring better connectivity to more citizens. And other African countries are following suit. One key challenge lies in selecting the correct partner to work closely with them to identify and meet all their Wi-Fi needs. The right network will enable a city to save money through increased efficiency (for example, smart traffic and energy systems, as well as optimal budget allocation) and generate additional revenue, by encouraging visitors to return, businesses to invest and people to take up residency.

Africa has started using ICT investment to power its economy to gain more benefits. Government and the private sector are working together to fast track this process. Ultimately, when connectivity is improved, all stakeholders start drawing advantage from it. We are already seeing significant foreign direct investment into key ICT initiatives across the continent. So, even though mobility has sparked the flame around access, it will be wireless that fuels it into the digital future. Here's to

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