I have no doubt that Africa and smart cities are an excellent match. Adding technology to every aspect of the urban environment and governance structure will surely address many of the challenges that Africa will have in the future, like climate change and population growth.

I'm not the only one who knows this. There are African individuals and governments alike who want to modernize our continent through smart cities. In part 2 of our series, I'll expand on the state of smart city development in Africa and the impact they will have on African nations and their inhabitants.

Let's get started.

## Africa's smart cities

In part 1, I briefly mentioned that Africa has her own smart city conference. Let's look at the list of African countries that are making smart cities a reality.

**Cote D'Ivoire:** The country is holding its inaugural <u>smart city conference</u> in early 2019. This conference brings together governments, startups, buyers, and sellers to modernize and urbanize the country.

**Rwanda:** At the 2017 Transform Africa Summit, Rwanda unveiled its plan to accelerate the adoption of ICT initiatives across the country, getting a step closer to <u>developing a smart city</u>.

**South Africa:** The <u>case</u> for a <u>South African smart city</u> is <u>strong</u>, considering the country is vital to the economic health of the continent, rivaling only our own country, Nigeria. <u>Johannesburg</u> <u>and Cape Town</u> are the likely contenders.

**Ghana:** IBM, the technology company, partnered with Ghana to launch the <u>Smarter Cities</u> <u>Challenge.</u> IBM has also launched challenges in **Morocco, Kenya**, and **Nigeria**.

**Nigeria:** Our country also announced a <u>smart city initiative</u>, which will also bolster ICT innovations and link them with physical infrastructure to improve service delivery.

Keep in mind that some of these initiatives were developed as long as 6 years ago. If you thought Africa was behind the curve, think again. We're now leading the charge.

## **Everyday benefits**

Smart cities are coming. So what does it mean for people like you and me? In short, more data means better products and services, more transparency, and increased personalization across the board. We no longer need to conform to the design of everyday things. In the future, products will adapt to our changing needs. Let's take a closer look at how smart cities will make our lives more sustainable and liveable.

**Smart buildings.** Future buildings will not just use new construction processes and materials, which I wrote about in another article, they will also use new technologies to optimize the user experience. This <u>apartment complex</u> will use a VR projection wall that changes locations. It will also monitor your health on the bathroom mirror in real-time. And people will use RFID tags instead of keys to enter their units. The architect calls this new era of architecture <u>cybertecture</u>.

**Better food.** With an increasing population that is rapidly moving into cities, we must ask an important question: how are we going to feed everyone? Vertical farms pose an answer. Vertical farms take up a fraction of land compared to traditional, horizontal farms. Smart buildings can monitor crop growth, changing temperatures and conditions as needed to grow the healthiest foods. While <u>vertical farms exist today</u>, smart cities will enable another agricultural revolution. On a side note, the wealth of data will allow for <u>foods to be recommended</u> to you based on your DNA.

**Implantable tech.** The Internet of Things will grow exponentially in the coming decades. There are going to be approximately 50 billion devices connected to the internet by 2050. Wearable tech is no exception. Wearable tech like the FitBit is undergoing a period of transition. The next phase will be called *implantables*, where technology will literally be <u>implanted in your body</u>. Implantables will <u>monitor your health</u>, act as a <u>smartphone</u>, and even <u>unlock doors</u>.

**Advancing accessibility.** Accessibility will be built into smart cities. While Africa's youth population will explode in the future, the elderly population will also grow substantially between now and 2030 as the life expectancy rises to 65. The elderly population is projected to <u>account</u> for 4.5% of the African population by 2030. We all know that physical and mental limitations accompany aging. Smart cities can prepare for those challenges by prioritizing inclusive design. There's even a toolkit to <u>promote inclusivity in urban planning.</u>

**Efficient transportation.** Transportation is undergoing a fundamental shift. It's no longer about ownership, it's about mobility as a service, called MaaS. Autonomous vehicles are already on our roads, and electric bikes and scooters are quickly entering the mobility market. These vehicles will also be connected to the IoT in the future, not to mention that they will be environmentally-friendly. By having autonomous vehicles communicate with each other, traffic jams could cease to exist. And since you won't be driving, speeding limits could increase. This will encourage people to buy more affordable homes further from the city, making the case for larger cities. And the car's interior will be redesigned to suit your needs. Soon enough, flying cars will fill the skies.

There you have it, a glimpse into how smart cities will change our lives. Building smart cities is a monumental undertaking. It requires the consultation and cooperation of everyone; the public and private sectors. It doesn't matter. But it's happening, and Africa won't be left out.