

PLATFORM POLITICS AND SILICON SAVANNAHS: THE RISE OF ON-DEMAND LOGISTICS AND MOBILITY IN KIGALI AND NAIROBI



Credit @ Prince Guma

From services and logistics to education, mobile phones – and increasingly smart phones - have become central to everyday life in African cities. The Covid-19 pandemic intensified this trend, allowing so much more of everyday life to be done ‘online’. Online shopping and e-commerce, for example, dramatically increased during the pandemic – as people were restricted from visiting grocery stores, restaurants or malls. While the digital divide is undeniable, so too is the rapid expansion of digital offerings.

The growth of digital offerings in Africa is made possible by sustained investment in ICT infrastructure. These (often invisible) investments include hardwired broadband (for example through undersea or underground fibre optic cables), mobile broadband (through wireless 3G, 4G, 5G access), cloud and colocation services, and connectivity provided through data centres. While still in its early phases, this infrastructure has enabled a ripe environment for the development of digital ecosystems. The investment landscape has also captured the interest of those who see technology as a solution to all sorts of social and economic problems. As such, Africa has become a playground for venture capital, supporting all sorts of start-ups that aim to solve the many problems of the continent.

Cities are central to this story. The idea of the ‘smart city’ has captured the imagination of public, private, and civic sectors of society with the promise of seamless service delivery. Smart city narratives are gaining momentum in African cities, finding their ways into all sorts of policy spaces. For example, the SMART Africa initiative was endorsed by all African heads of state in 2014. While the idea of the ‘smart city’ has been critiqued for sound reasons by academics, a thoughtful reflection on the relationship between digital ecosystems, new service delivery models, and growing cities is necessary.

One of the areas where this ‘smartness’ is currently landing – and where critical reflection is much needed – is in the motorcycle taxi sectors: a sector seen to be innovative yet somewhat dysfunctional. Affectionately known as *boda boda* in Kenya and *moto* in Rwanda, motorcycles have become ubiquitous with mobility in African cities. Alongside mini-busses and tuktuks, motorcycles provide valuable services, moving people and goods, and providing a whole range of services. Their proliferation has been shaped by many factors, including the material conditions of Africa’s growing cities, global supply chains for vehicles, the need for work – particularly among young people.

This article introduces research led by the [African Centre for Cities](#) (University of Cape Town) on the platforms and dynamics that are emerging with motorcycle mobility and logistics within Nairobi (Kenya) and Kigali (Rwanda). Of particular interest was the ways in which motorcycle taxi riders (those who earn a living transporting goods and people on the back of their bikes) connect to users (customers who use

digital platforms), businesses (companies that supply goods and services through platforms), and the regulatory frames that govern mobility in African cities.

The research involved interviewing private and public stakeholders and actors (such as regulators, local government, tech companies, and experts in the field); reviewing policy and legislation; playing with apps; and doing deep dives into examples of local platforms: Uber and GoBeba (Nairobi) and YegoMoto and Vuba Vuba (Kigali). These cases provide valuable insights into the rise of the platformization of motorcycle taxis in African cities, as well as the lack of coherent regulation at this important urban interface. This research was funded by the VREF Mobility and Accessibility in African Cities Programme – an initiative that supports African academics to develop collaborative research. This project included scholars from universities in Cape Town, Nairobi, and Kigali.

Nairobi

Nairobi, the capital city of Kenya and its political, economic, and cultural centre, has embraced technology as a means to improve service delivery in a sprawling and splintered city. Given this tech-friendly environment, Nairobi has become a test-bed for both global and home-grown tech platforms in the mobility sector. The last five years has seen rapid emergence (and demise) of many a mobility platform in Nairobi. The enthusiasm in the platform sector is not mirrored in the regulatory space as legislators struggle to keep up with the rapid changes. This means there is minimal regulation and some confusion about where governance responsibility lies.

In Nairobi we looked at two platforms. For Uber we focused on the services enabled by *boda bodas* including Uber Eats, Uber Boda, Uber Connect and Uber Light. Uber is at the forefront of this competitive market. They have done this by lowering fares, often despite escalating operational costs for drivers, reducing end user costs through the lite version, making it easier for restaurants to join, launching the electric *boda* to reduce carbon emissions and fuel costs, and adapting to local specificities, such as allowing cash options (that can be paid through MPESA). But, despite aiming to offer a high tech and fully integrated option, Uber has had to adapt to local contexts by providing Cash and Lite options for users who required more entry level engagement.

Locally developed company, GoBeba, was conceptualized as a platform to respond to localised needs such as bringing smaller retailers in, traffic, and young people's desire for convenience. GoBeba doesn't have an app per se. A shopping list (including things like gas, water, groceries etc) is sent to the website. A driver (champ) is allocated to do the shopping and deliver the goods to the customer. Its success is its local responsiveness and digital-analogue options of using the platform. With GoBeba like many others, you don't pay through the app.

Kigali

Kigali, the capital and largest city in Rwanda, home to around 60% of the population, has welcomed the idea of city smartness. It has proved a fertile ground for start-ups and has gained the reputation as a prominent tech hub for African cities. The acceleration of the motorcycle taxi is closely related to Kigali's digital impulse.

In contrast to Nairobi where there are myriad local and global companies, the motorcycle ecosystem in Kigali is generally made up of home-grown platforms (although some are still financially or technically supported by international actors). Some platforms are endowed with mobile apps with WhatsApp integration hence requiring smart phones for their use while others are website-based where orders can be placed directly. Also, in contrast to Nairobi, digital ecosystem in Rwanda is heavily steered by government institutions and government-led initiatives, RURA being the most active.

In Kigali we looked at two key players in the mobility ecosystem. Vuba Vuba is known as the covid app, entering the scene at an opportune moment in January 2020 as Jumia exited because the market was too small (Jumia is one of the biggest in Kenya). Vuba Vuba experienced a 200% growth after the lockdowns

began. This has subsequently plateaued. Vuba Vuba delivers a range of products, but food delivery is the predominant service. Important to the success of the platform is its low tech and non-digital components through phone calls and WhatsApp – i.e. the app is seldomly used seamlessly on its own.

YegoMoto's ride-tap-pay was the first of its kind and radically transformed the industry (later to be called Intelligent Connected Fare Meter). YegoMoto installs a system on a motorcycle that consists of a metering device and a GPS tracking device. This calculates the fare and tracks a wide range of data that is connected to RURA enabling ongoing monitoring, laying a foundation of advanced city analytics that can inform regulation and urban planning.

What we have learned

While we can't go into the details of the cases in this article (see full report), looking across both cases, there are five insights worth mentioning:

First, there are a wide range of platforms – some of which are local, some continental, and some global. Both local and global platforms are adapting in creative ways to respond to the situation of the places in which they are operating. For example, many people don't have smart phones with ample space and data to download apps, and many prefer to use WhatsApp than in-app messaging. Manual work-arounds are common, with people extending the useability and adapting the system to serve their needs.

Second, some platforms are emerging as multi-functional and integrated – what might be called Superapps. Super apps fundamentally act as a single portal to multiple services, ranging from delivery to e-hailing, to communication, to social media. Fintech is key to this story of superapp-ness – integrating payment into the platform. While cash still dominates, there is a rapid rise in mobile money, and platforms are working to integrate this in multiple ways. Given the hybridity of algorithmic and analogue workarounds, the notion of the super app in African cities is something to keep an eye on.

Third, the regulatory context is struggling to keep pace. Given the rapidly changing sector, especially since 2020, the state and its policy has not had time to keep up. In both places, and what we have seen in a cursory look elsewhere, given that policy and governance tend to be located nationally, there is not much power at a sub-national level to engage with the textured and contextual, the nitty gritty realities happening on a daily basis in cities. While both e-hailing and e-logistics rely on a motorcycle, operator, user and smart phone, regulatory regimes and governance of platforms are often dealt with separately. The lack of coherence in governance arrangements in relation to the motorcycle taxi ecosystem (which includes businesses, riders, users, platforms, and increasingly mobile money) and different scales of regulatory regimes, has implications for local places, and global flows that needs further attention.

Fourth, these cases help us to see how business models are rapidly shifting at the interface between the motorcycle and the platform. Shifting business models are resulting in infrastructural effects. For example, drop shipping, dark kitchens, and other “dark” services (such as laundry), and new constellations of the temporary storage of goods is already shifting the material landscape of cities, and will ultimately impact on planning.

Finally, what our research has shown us is that the rise of on-demand logistics and mobility is set to continue to expand and adapt in African cities. This demonstrates that there is a clear need to get ahead of the curve in terms of how the proliferation of platforms takes hold. This requires paying careful attention to the digital ecosystems and arrangements that are emerging between riders, users, businesses, and governance.