



PLATFORM POLITICS AND SILICON SAVANNAHS

Motorcycle mobility and last-mile logistics
Platforms, motorcycles and financial innovation

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Platform Politics and Silicon Savannahs

Motorcycle mobility and last-mile logistics

PHASE 1

We focused on understanding how **urban mobility** is being reconfigured by the introduction of **platform-based systems** for the two-wheel paratransit sectors in African cities, with a particular interest in the relationship between **mobility practices**, **policy** and **governance**.

While we focused on the platforms and dynamics that are emerging with **motorcycle mobility** and **logistics** within two cities [**Nairobi** and **Kigali**], there is wider applicability to paratransit in African cities at large.

Platform Politics and Silicon Savannahs

Platforms, motorcycles and financial innovation

PHASE 2

We picked up on a gap we had started seeing in phase 1 on how the **platformization** of motorcycles interface with discourses and practices of the **fintech** industry. We were particularly interested in **payment systems** and other **financial infrastructures** as key enablers of **digital transactions**.

In this report we showcase some important **trends** at the interface of fintech and the platformization of motorcycle economies in urban Africa.



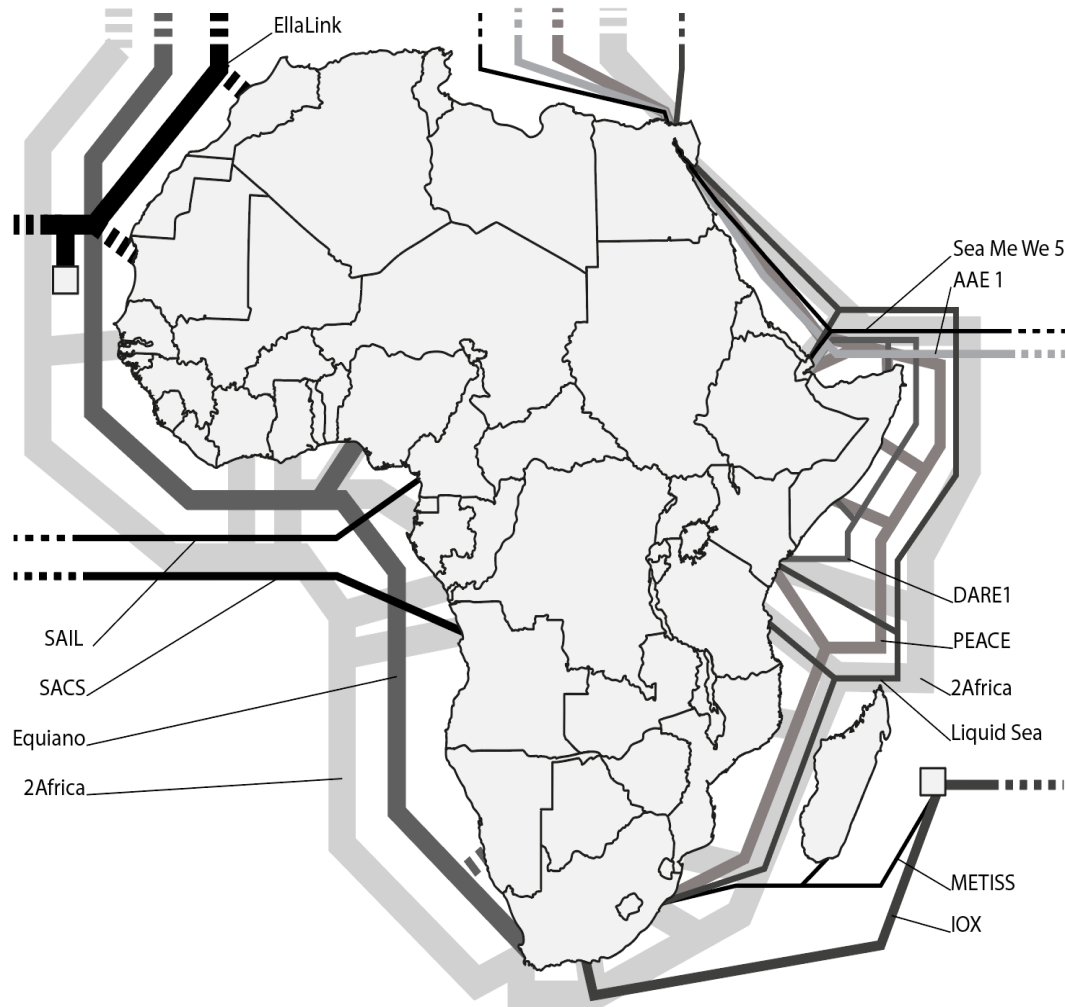
“Splintered” urban infrastructure

- Colonial planning, cul-de-sacs, no house numbers
- Under-planned urban growth, under-maintained road networks
- No mass urban public transport systems

Motorcycle taxis in urban Africa

- An ordinary fixture of urban life
- An unwieldy sector always on the brink of regulatory fights
- A pool of employment for young men = political client group
- Offering diverse services, from commuting to last-mile logistics

Context

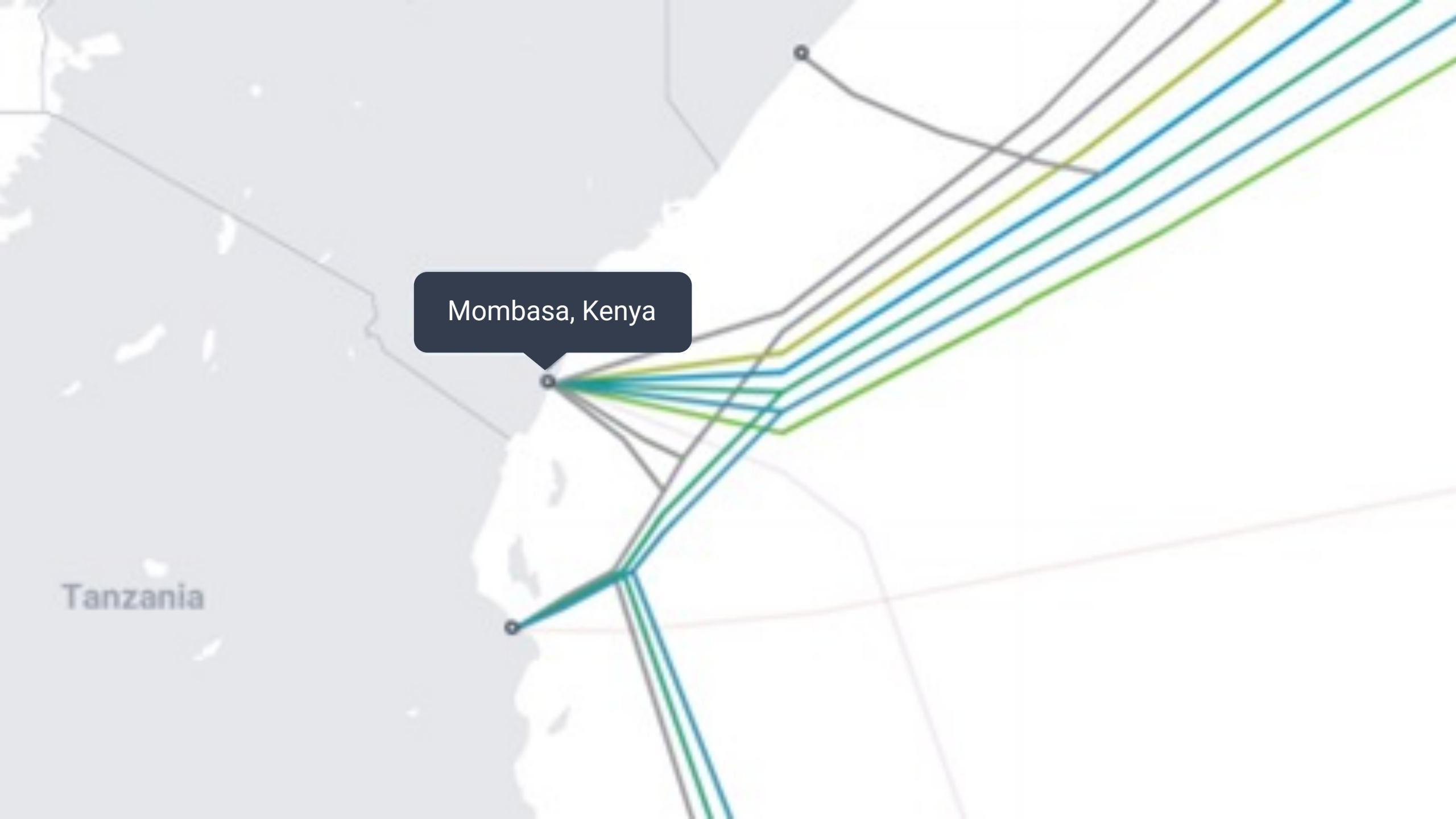


10-15 years of investment in the supply side of digital infrastructure

- Broadband
- Affordable Chinese handsets
- “Smart city” plans

Venture capital rush in Africa

- Fastest growing VC region in the world
- Local and international capital available for testbeds and experiments



Mombasa, Kenya

Tanzania

Methods and Process



- **Fieldwork:** interviews, observation, actor mapping, getting around, playing with apps, policy review, trawling promotional material etc
- **Collaborative** approach to fieldwork
- **Comparative conversations:** side-by-side case research
- **Research workshop / retreat:** Nairobi & Kigali
- **Reading group:** Fintech / Africa
- **Writing workshops:** writing support process
- **Public discourse:** sharing research at various public events

PLATFORM ECOSYSTEMS

Nairobi has become a test-bed for both global and home-grown tech platforms in the mobility sector



REGULATORY FRAME

While there has been a surge of excitement in this space, the emerging platforms - and surrounding ecosystem - do not fit squarely within the existing legislative and regulatory frameworks of Nairobi or Kenya. Both for logistics and commuting, the use of motorcycle taxis is a grey area in existing policies.



PLATFORM ECOSYSTEMS

The majority of road trips are motorcycle trips. A traffic model split done in 2018 showed that the motorcycles consisted of around 51% of all counted traffic in Kigali

REGULATORY FRAME

The digital ecosystem in Rwanda is dominated by government institutions and government led initiatives and these include the Rwanda Information Society (RISA), the Rwanda Utility and Regulatory Authority (RURA) and the Ministry of ICT (MINICT).



PLATFORM ECOSYSTEMS

Cape Town's sector is relatively new, does not include e-hailing and built on existing retail (e.g. expansion of Checkers into sixty60)

REGULATORY FRAME

There is a combination of national and city-scale governance. The sector is regulated by ICT and e-commerce and mobility, but connecting these is catching up





- 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 workarounds are common, with people extending the useability and adapting the system to serve their needs.



- Some platforms are emerging as multi-functional and integrated “**superapps**” that 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 rapidly changing sector, especially since 2020, **regulatory contexts** are struggling to keep pace. Policy and governance tend to be located nationally and there is not much power at a sub-national level to engage with the textured and contextual realities happening on a daily basis in cities.

While both e-hailing and e-logistics rely on a motorcycle, rider, user and smart phone, regulatory regimes and governance of platforms are often dealt with these separately.



- These cases help us to see how **business models** are rapidly shifting at the interface between the motorcycle and the platform that 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.



- 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 **emerging digital ecosystems and arrangements**.





Frontier of the unbanked

- **Promise:** financial inclusion of informal economies
- **Critique:** riders becoming financialised subjects

Disruption of legacy systems

- **Promise:** fintech innovation as a solution to clunky systems
- **Critique:** fintech merely about capturing new markets



Datafication and decision-making

- **Promise:** filling 'data gaps'
- **Critique:** privacy, algorithms reinforcing inequality

Cities as test beds

- **Promise:** smartness in cities key for problem solving
- **Critique:** problematic innovation discourse detached from reality

Techno-ambivalence

- Grounded understanding of technology in African cities between techno-pessimist and techno-optimist binaries

NAIROBI

Jack Odeo

In Nairobi, boda boda have been widely available for quite some time. Given the city's reputation as a test bed haven, there has been a significant increase in fintech innovations, expanding beyond M-Pesa's role as a payment gateway. New players in the market now offer asset finance and a growing range of supplementary services.

Companies like M-Kopa, leveraging their pay-as-you-go model, are currently testing asset finance options for e-bikes



They argue that by collecting crucial data from riders and the bikes themselves, alternative measures of creditworthiness can be established that enable the provision of additional services for the riders.

KIGALI

Alexis Sebarenzi

In Kigali, the motorcycle sector operates under strict regulations mandating the installation of an Intelligent Connected Fare Meter (ICFM) on all motorcycles. Compared to Nairobi and Cape Town, Kigali has fewer players in the market, with Yego Moto and MoMo dominating the industry.

Unlike Nairobi, there is currently no platform-based fintech innovation offering asset finance and additional services. However, this is expected to change in the near future.



The data gathered through the ICFM system is building a growing repository of information that has the potential to drive fintech innovation. Furthermore, the government has established a regulatory sandbox, authorized to facilitate pilots, which helps shape the fintech ecosystem while navigating the stringent legal requirements typically imposed on financial operators.

CAPE TOWN

Alicia Fortuin

In Cape Town, the motorcycle sector experienced significant growth during Covid-19. Fintech companies are collaborating with platforms by leveraging the existing sophisticated banking systems.

Unlike in Kigali and Nairobi, Cape Town has multiple payment gateways that are directly linked to banks rather than relying on mobile money services. Additionally, the sector has mainly evolved from traditional retailers looking to expand their offerings.



For instance, the Checkers Sixty60 grocery shopping app has made strides in this regard. The case of Cape Town highlights the presence of unexplored opportunities, emphasizing the importance of ensuring that riders, who are the most vulnerable and precarious within the system, are not burdened with the costs associated with fintech innovation.



- **The digital platform** becomes the site through which other financial opportunities (such as insurance, asset finance) open up in relationship to the IOT-enabled physical commodity of the bike.
- **Payment systems** - either sophisticated or mobile money - have been the foundation through which fintech innovations are built and iterated in the motorcycle space.
- **Data** makes an ordinary informal economy into a speculative one, by arbitraging the risk gap (ie. actionable data about the last mile creates an absolute and a relative reduction in the risk associated with financing the *boda boda* industry) - mostly only a promise so far.



- **The VC start-up** space requires big dreams/small pilots. Regulatory frameworks not designed for pilots. Regulatory space chases innovations.
- Linkage with the green/just transition. Platform + fintech becomes fundamental to the **e-mobility**. Asset finance central to the model.



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