# ***Building Resilience in the age of COVID-19 - A Closer Look at Kenya's Public Transportation System***

## *Background*

Matatus power mobility in Nairobi - close to 90% of the city's population[1] that uses motorized transit depends on public transportation. The term public transportation, however, is somewhat of a misnomer in Kenya, as the matatu industry operates through complex layers of private ownership. Typically, a private investor buys the vehicle; they are then required by law to register it under a SACCO (Savings and Credit Co-operative Union). Depending on the agreement the owner signs with the SACCO, either party may be responsible for hiring a driver and conductor to operate the vehicle on a daily basis. The SACCO takes a portion of daily revenue, often known as a token fee, with the rest going to the owner who then pays the crew. This revenue model underpins the industry's incentive structure - matatu crews often overload their vehicles and drive at breakneck speeds to meet revenue targets given by matatu owners. In addition, rampant corruption means that police officers, who often stop matatus for traffic law infractions both real and imagined, take part of those earnings as bribes.

## *Problem Statement*

This year, these conditions have provided prime grounds for the spread of the coronavirus. According to the director general of Kenya's National Transportation and Safety Board, each matatu ferries up to 300 people per day. The design of matatus makes it difficult for passengers to physically distance, and overloading crams more people into already tight quarters. Matatus also transact in cash, which creates yet another point of contact, and since no record of payment is given, it is virtually impossible to trace the contacts of someone who tested positive for COVID-19 if they travelled by matatu. The public health directives given by the government mandated that matatus reduce their capacity by half to prevent the spread of the virus, and that crews provide hand sanitizer and check the temperature of all passengers before they board. In addition, a nationwide curfew imposed after 7 p.m has reduced the hours during which matatus can operate. While matatus have raised their fares in response to the situation, the additional cost of these essential public health measures has greatly impacted the matatu sector financially. This proposal aims to find ways - through public-private partnerships, innovation and new technologies - to ensure the safety of all stakeholders in this space, while mitigating the economic shocks to the transportation industry in Kenya.

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[1] Salon and Guylani

*Roadmap to Adoption*

In Kenya, there is currently no state-operated road passenger public transport service. The Kenyan government has largely stayed out of the public transportation industry, with its sole role in the sector being legislative and regulatory. However, this pandemic calls for a different approach - one that prioritizes partnerships between matatu owners and the government while taking advantage of homegrown technology solutions.

Previous attempts to introduce contactless payments in the matatu sector have failed, despite Kenya's preeminent status as a global leader in mobile payments. This is mainly due to a lack of alignment of incentives among stakeholders in the sector - matatu owners have been distrustful of the government's involvement, seeing contactless payments as an avenue for the government to increase the taxes levied on them. There also exists no motivation for law enforcement to help with compliance efforts since such technology would prevent them from collecting bribes from public transport operators. Further, fierce competition between the banks introducing these solutions meant that individual banks' payment cards and machines were applicable only to specific matatu routes, as some banks used Near Field Communication (NFC) for their cards while others used more traditional swiping features. The lack of interoperability between these systems negatively affected the adoption rate. **The government should work with mobile money operators such as Safaricom to develop a single, accessible contactless payment solution that works across all banks and all saccos; treating it as a public service so that matatu owners and consumers are not charged high fees.**

Reducing matatus' capacity and daily trip count has greatly affected the financial performance of the sector, with revenues dropping 70 - 80% over the past six months, according to Matatu Owners Association chairman Simon Kiragu[2]. Currently, the bulk of this cost is passed on to the consumers, with passengers bearing the brunt in an already weakened economy. This has adverse downstream effects on the rest of the economic system, as consumption approaches record lows. It is imperative that these owners remain in business for the economy to bounce back from the current crisis. **The government can partner with historical partners like the World Bank to provide subsidies to cushion the industry from these losses and spur economic activity,**

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[2] Ilako, C. (2020, March 31). Public transport sector loses millions daily over COVID-19. Retrieved September 15, 2020, from https://www.the-star.co.ke/business/2020-03-31-public-transport-sector-loses-millions-daily-over-covid-19/

**preventing matatu owners, most of whom own between one and five vehicles, from going out of business.**

Some of the problems that have plagued the industry for decades, such as deprioritization of organization and safety norms, have more dangerous outcomes in a COVID-19 world. As the sector looks towards recovery, operational synergies must be implemented. These include efficient route planning and coordination, vehicle tracking systems that provide real-time alerts to users regarding the status of their trip, and improved vehicle design that allows customers to maintain a safe distance from each other. The government should provide low interest loans and grants to SACCOs, with priority given to those who have demonstrated high compliance to COVID-19 mitigation measures. This disrupts the current incentive structure, leading operators to adopt better systems that can reverberate across the industry. **By facilitating collaboration between the matatu sector and private companies in industries such as logistics, technology and vehicle manufacturing, the government can promote innovation in the matatu industry while safeguarding the public health of the millions of citizens who use these vehicles every day.**

## *Conclusion*

In summary, we have established that the Kenyan government needs to increase its involvement in the public transportation sector. The consequences of their absence in the past has resulted in the lack of organized structures within the industry, which would otherwise have been helpful in increasing the operational efficiencies needed to mitigate the disastrous effects of commuting in an overcrowded public transportation system during a global pandemic. Addressing this important problem will cushion Kenyans from the looming effects of a public health catastrophe, and alleviate the financial disaster that awaits an industry responsible for supporting Kenya's majority informal economy.

## *References*


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