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A CASE STUDY OF MATATU CASHLESS FARE COLLECTION INITIATIVES IN NAIROBI

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ABSTRACT

Reliance on cash fare collection, in a 'target system' of driver remuneration, has contributed to poor quality of paratransit service in Sub-Saharan African cities. Cashless Fare Collection (CFC) initiatives have therefore been seen as a possible reform mechanism. Despite the apparent benefits of CFC, and numerous attempts, the bulk of initiatives in the minibus paratransit sector have failed. This paper reports on an exploratory study of the experiences of CFC initiation amongst matatus in Nairobi, undertaken to identify key stakeholders, and to establish reasons for failure. The research method involved (n=15) qualitative stakeholder interviews, and a (n=6) semi-structured matatu vehicle crew intercept survey. It was found that there was no single, common initiator of CFC projects. Stakeholder expectations included: interoperability of systems; the generation of demand and supply data; increased tax compliance; standardised fares; prevention of farebox leakage; salaried employment of vehicle crews; and a reduction of bribery and extortion. Implementation challenges included: a lack knowledge of the system; weak enforcement of CFC regulations; no interoperability; and a lack of trust. The study identified 46 stakeholders in the CFC initiatives, of which 18 were identified as key, in so far as they could render the system inoperable if their needs are not met. Reasons for failure included: no prior consultation directed at understanding the sector; sabotage of on-board CFC equipment by vehicle crews; cartels formed to undercut the fares of compliant competitors; no clearinghouse or harmonisation of bank commissions; and a lack of government support.

1. INTRODUCTION

The emergence of Cashless Fare Collection (CFC) systems in the paratransit industry traces back to 1999 with the Faircard initiative in Johannesburg. However, the period 2014-2018 registered the bulk of the CFC initiatives in both public transport paratransit (i.e. midi- and minibuses) and for-hire paratransit (i.e. motorcycle-taxis). Nairobi, among all Sub-Saharan African (SSA) cities, registered the highest number of CFC initiatives overall (9 out of 25) (Tinka & Behrens, 2019). The emergence of these initiatives was in response to minibus paratransit, or matatu, sector ills such as farebox revenue pilferage, abrupt fare hikes, bribery, and chaotic operations (Lubanga et al., 2017; Mondata, 2019). While there was general acceptance that CFC was beneficial to reforming public transport in Nairobi, CFC systems were resisted and subsequently they failed (Kagure, 2019; Lubanga et al., 2017; Mondata, 2019). While the bulk of the CFC initiatives in minibuses have failed, some initiatives in motorcycle-taxis have endured. The reasons for failure in the one mode and success in the other are not yet well understood.

This explorative study of the matatu industry in Nairobi investigated who initiated the CFC projects, and what the preferences, expectations, and challenges of key stakeholders were. The study, as part of a broader doctoral research topic, further sought to test a starting proposition, based on an earlier literature review, that there are diverse stakeholders in the paratransit industry with differing interests, needs and sometimes divergent objectives, and that failure of any CFC initiative to satisfy these diverse needs and interests will lead to resistance.

The paper is structured in five sections. The next section offers a brief history of the regulation of the matatu industry in Nairobi, focussing on CFC requirements. The third section describes the research method, the fourth section presents findings resulting from thematic analysis, and the fifth section draws conclusions.

2. LITERATURE REVIEW

The matatu industry has grown over time to be the dominant mode of public transport in Kenya. This growth dates back to the 1950s with a public transport gap-filling role as the urban populations increased (Graeff, 2009; Ommeh et al., 2015). The industry has grown from ~400 vehicles in the 1970s, to ~17,600 vehicles in the 1990s, to ~40,000 vehicles in the 2000s (Graeff, 2009; Oira, 2015), to the current estimate of ~80,000 vehicles (Respondent 02 interview, 27 August 2019). The matatu industry operated illegally until 1973, when a Presidential decree legalised its operations, but without any form of licensing (Graeff, 2009; Khayesi, 1999; Mitullah and Onsate, 2013; Ommeh et al., 2015).

Vehicle owners largely operated as owner-drivers until the 1980s, when due to increased demand, and the entry of wealthy politicians and businessmen into the market, the leasing of vehicles to drivers for daily or weekly returns became common (Mutongi, 2006). Weak regulation and strong in-the-market competition led to dangerous driver behaviour. The cash target business model for drivers motivated maximisation of the number of trips made and passengers carried, and thus the farebox revenue at the end of the day (Dumba, 2017). In her ethnographic study, Mutongi (2006) describes vehicle owners 'ruthlessly firing' drivers and conductors for failing to meet the required target, and drivers and conductors being forced to work long hours, sometimes using drugs and other substances to keep alert. She argues:

"Their [drivers and conductors] behaviour is but a manifestation of external pressures. They do not race to experience sensations since they are not in it for a sport. They speed to meet deadlines if they are to keep their jobs" (Mutongi, 2006: 564).

Because of deteriorating quality of service, a number of reforms have been attempted, including but not limited to:

- 2010 Ministerial directives for phasing out 14-seater vehicles, and registering every matatu vehicle with a Saving and Credit Cooperative (SACCO), directed to decongesting the city and streamlining industry operations (Mitullah and Onsate, 2013; Ommeh et al., 2015);
- legal notice 23 of 2014 requiring formal employment of drivers and conductors, and cashless payment systems within four months; and
- legal notice 75 of 2014 (amending legal notice no 23) substituting cashless payment systems with 'cash lite' payment systems requirements, and providing direction on the use of contactless integrated circuit cards (EMV cards) (Government of Kenya, 2014a, 2014b).

National Transport and Safety Authority (NTSA) regulations, issued in 2014, required CFC initiatives to:

- register with the Central Bank of Kenya, and ally with a bank;
- issue hardcopy receipts to passengers;
- be interoperable with other CFC initiatives;
- ensure that a passenger is charged only for the distance travelled;
- employ drivers and conductors within Savings and Credit Cooperatives (SACCOs) as full-time employees (and not as commission-based 'casual' employees); and
- use EMV (Europay, Mastercard, and Visa) standard cards (Republic of Kenya, 2014).

These reform interventions have in one way or another been resisted, and none have produced their desired outcomes. Several reasons have been posited for this lack of impact, among them: inadequate consultation with key stakeholders; lack of government/political will and enforcement; vested political interests; conflicting stakeholder interests; and low institutional capacity (Kagure, 2019; Oira, 2015; Ommeh et al., 2015). Rushed and uncoordinated implementation of regulations, which fail to understand the needs of key stakeholders, have resulted in either short-lived or non-implementation (Oira, 2015; Ommeh et al., 2015).

Two main conclusions can be drawn from this brief literature review. First, that common matatu service quality problems in Nairobi are, at least in part, the result of the cash-based target system of driver remuneration. Second, that resistance to reform initiatives, particularly CFC, is, in part, a response to inadequate consideration of diverse stakeholders' interests and needs in policy formulation.

3. STUDY METHOD

The study of CFC initiatives in Nairobi was conducted in August to September 2019. The study involved qualitative stakeholder interviews, and a semi-structured matatu vehicle crew intercept survey. Respondents were recruited through snowballing, a non-probabilistic sampling method of respondent referral and selection.

Based on the review of Nairobi matatu literature, stakeholder groups were identified, together with their attributes and behavioural traits. This guided the formulation of the interview and intercept survey questions. The questions in both the stakeholder interviews and intercept surveys focused on stakeholders' roles, interests, and needs, and their experiences of the CFC initiatives that had been attempted in the city. Thirty potential respondents among the stakeholder groups were identified for personal interviews, but only 15 were accessed. One interview was discarded in analysis because the respondent could not recall sufficient details of his experience with CFC. Drivers and conductors were intercepted at the main matatu ranks, with facilitation by one of the chief stewards. Due to the nature of matatu operations and the associated time availability constraints, and perhaps because the principal investigator was a foreign national, most of the drivers and conductors declined to respond to the intercept questionnaire. Only 6 (of 20) vehicle crew members intercepted, consented to completing the questionnaire.

The personal interviews were audio recorded in English and later transcribed. The questionnaire responses were captured in a MS Excel database. The transcribed interview files were converted into plain text format files and the MS Excel database converted into a

CSV file. and both exported into R (RQDA) for analysis. Using thematic analysis and coding in RQDA, the transcribed interviews were analysed for: stakeholder identification; stakeholder influences and interests; how the CFC initiatives started; CFC preferences and experiences; and reasons for the failure of CFC initiatives. The stakeholders were categorised according to their attributes of power/influence, proximity and urgency, using Bourne's stakeholder mapping method (Bourne & Walker, 2005). The categorisation was based on a subjective ranking of each stakeholder based on prior literature review and on interview information. Subsequent visualisation of stakeholders followed proximity-power and urgency-power grids (Bourne & Weaver, 2010).

4. STUDY FINDINGS

Study findings are discussed in terms of the CFC projects initiated, the stakeholders involved, and the themes that emerged in qualitative analysis of stakeholder preferences and expectations, implementation challenges, and the reasons for failure.

4.1 Initiatives

The following four card-based CFC initiatives were started in Nairobi, between 2013 and 2017:

- BebaPay launched by Google and supported by Equity Bank;
- Abiria card – the Mastercard – launched by Kenya Bus Service (KBS) supported by TapToPay, a Hong Kong-based technology company and Kenya Commercial Bank (KCB);
- My1963 card launched by the Matatu Owners Association (MOA), and supported by Safaricom and Diamond Trust Bank; and
- Visa card also supported by Equity Bank.

It was generally acknowledged by respondents that none of the initiatives could be described as having gone into full operation. The Abiria card lasted for close to a year of piloting, while the other three initiatives were piloted for between two to six months. There was uncertainty among the respondents of the exactness of the periods of initiation due to the passing of time.

The CFC systems were initiated by different actors at different times. There was no common, sole initiator of these systems, but rather a mixture of foreign private sector agencies partnering with local paratransit stakeholders, and a mutual agreement between government agencies (the National Transport and Safety Authority and the Ministry of Transport) and other paratransit stakeholders, such as the Matatu Owners Association and the Matatu Welfare Association to start CFC systems to address sector challenges.

4.2 Stakeholders

The complex web of stakeholders was identified from a triangulation of matatu literature review findings and primary data. The literature review was undertaken prior to the fieldwork, and the qualitative interviews acted to confirm the stakeholder groups already identified, as well as identify new stakeholder groups. The identified stakeholders were categorised by rating stakeholder attributes. Stakeholders were categorised as having high to low proximity (i.e. how closely they were associated with the CFC initiative), high to low urgency (i.e. how large their stake was in the CFC initiative and what lengths they are

prepared to go to, to achieve their goals) and high to low power/influence (i.e. how powerful and influential they were in determining the outcome of the CFC initiative), as indicated in the stakeholder visualisation grids below. Appendix A presents the rating scales applied in categorisation (see Bourne and Weaver, 2010 for an explanation of the stakeholder visualisation method applied). Appendix B presents the final list of stakeholders identified, the acronyms used in visualisation grids, and their attribute ratings.

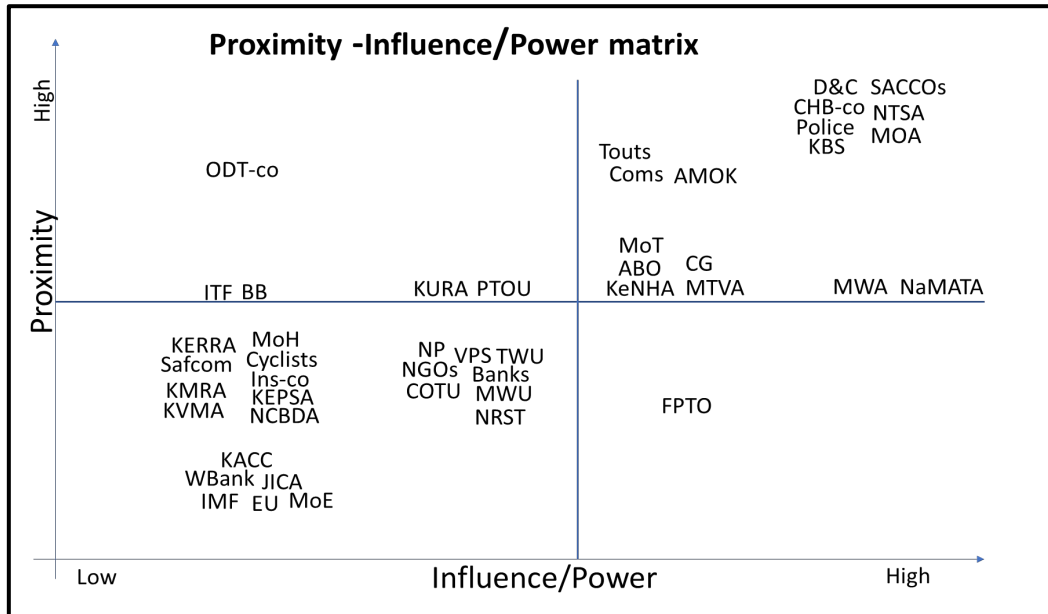


Figure 1: Stakeholder proximity to operations vs influence/power

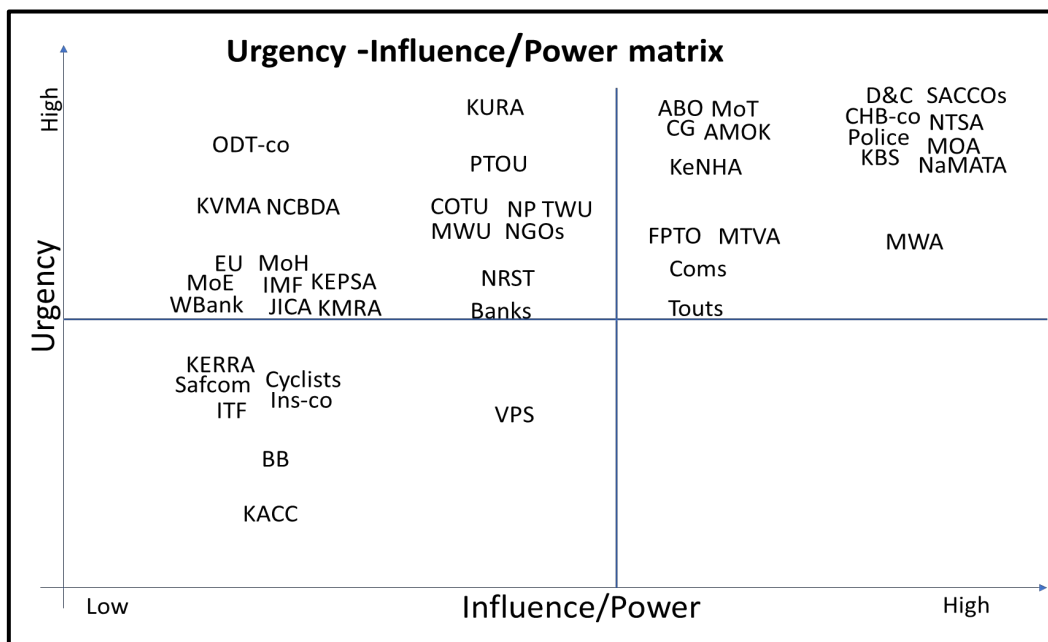


Figure 2: Stakeholder urgency vs influence/power

There is a slight difference among the key stakeholders generated by the two grids. One stakeholder (FPTO) is brought into the 'key stakeholders' quadrant by the urgency-influence/power grid as opposed to the proximity-influence/power grid. and the stakeholder

attributes categorisation. Table 1 presents the roles and interests/needs of the key stakeholders identified by the visualisation grid method.

Table 1: Key stakeholder role and interest/needs in the paratransit industry

Key stakeholder	Role in the paratransit industry	Interest/need
ABO Association of Bus Operators	mobilisation of member bus companies for improvement in public transport service delivery in Nairobi	business interests – return on investment
AMOK Association of Matatu Operators-Kenya	mobilisation of both operators and owners of PSV vehicles, and protection of member interests	improved incomes for its members
MoT Ministry of Transport	policy formulation of road transport	mass transit in public transport
NTSA National Transport and Safety Authority	regulation of road transport	safety on roads, driver behavioural change
CG Nairobi County Government	policy formulation and regulation of public transport within Nairobi county	decongestion of the city
SACCOs Savings and Credit Cooperatives	organisation of individual vehicle owners for management of operations	incomes, and professional matatu operations management
CHB-co City Hoppa Bus Company	providing public transport services	business interest - profitability
KBS Kenya Bus Service	provide leadership through organised public transport and lobbying government for better operating environment	business interests – return on investment for franchisees.
D&C Matatu drivers and conductors	day-to-day operation of public transport vehicles	income, job-security
MOA Matatu Owners Association	investment in public transport through provision of operating vehicles (matatus)	business interests – return on investment, corrupt-free sector
NaMATA Nairobi Metropolitan Area Transport Authority	sustainable public transport within the Nairobi metropolitan area	mass movement of people within its area
Police Police	streamlining of traffic operations through control of movements at intersections	free flow of traffic, and observance of road rules and regulations
KeNHA Kenya National Highway Authority	management and maintenance of national roads, implementation of national policies related to roads	safety and quick flow of traffic on roads
MTVA Matatu Transport Vehicles Association	lobbying for members interests	business interests – incomes.
Coms Commuters/passengers	usage of public transport vehicles for mobility	safety, comfort and quick movement
FPTO Federation of Public Transport Operators	protection of member interests for a conducive business environment	conducive operating environment
Touts Touts	rank management (though illegally)	incomes
MWA Matatu Welfare Association	lobbying for good working conditions of matatu workers	improved working conditions

4.3 Expectations

The preferences and expectations of CFC initiatives recorded in interviews and the survey, though explored with respondents through different questions, were similar across respondents. These were given in reference to the challenges stakeholders experienced either before or during the implementation of the CFC systems.

4.3.1 Consultation, Training, and Sensitisation

There was no extensive stakeholder consultation undertaken either by the government or the other two big drivers of the CFC initiatives, that is MOA and KBS. No training on the use of the CFC equipment was provided, nor was there any sensitisation of the public on how the CFC systems work. It was noted by some respondents that this would have elicited key user preferences, as well as addressed fears raised by drivers and conductors about losing jobs. Expectations that stakeholder roles and interests would be mapped, and used to customise CFC systems to local needs, were not fulfilled.

4.3.2 Organisation and Increase in Taxes

Government officials expected that the CFC systems would create a much desired organisation of the transport system, away from the chaotic operations generated by the target system discussed earlier. It was hoped that full CFC in the public transport sector would have interoperability across different CFC systems, with an ability to charge fares only for the distance travelled by a passenger. It was also hoped that CFC would enable fixed schedules, generate planning data on demand and supply, and facilitate the levying of taxes based on verifiable data on passengers carried.

4.3.3 Cards and Their Usage

There was a preference for a single card, with card readers fixed at vehicle entrances so that passengers could swipe or tap to pay as they entered vehicles (rather than fare collection via mobile card readers held by conductors). There were expectations that CFC would end bargaining for fares through fixed tariffs for specified distances or routes, as well as the practice of conductors cheating passengers by not returning change after cash fare payment.

4.3.4 Farebox Transparency and Trust

Respondents reported a lack of trust between vehicle owners and crews, and estimated that ~30-40% of farebox revenue is not declared by vehicle crews. This, they noted, limits vehicle owners in expanding businesses and renewing vehicles, as well as in maintaining vehicles in good condition. The owners expected that the CFC systems would make farebox revenue fully transparent.

4.3.5 Government Support and Single Entity Control

There was an expectation, as well as a preference, for government to manage the CFC system as one single entity, or engage one single private entity to do so. Reference was made by some respondents to Safaricom as an existing and trusted local entity that could perform this role. This would ensure confidence in, and reliability of, the CFC system, in terms of the distribution of revenue to different stakeholders.

4.3.6 Employment of Vehicle Crews

Drivers and conductors expressed a preference for formalised employment conditions as full-time employees with full benefits, such as medical insurance and national social security funds. However, daily or weekly salary payments were preferred over monthly payments.

4.3.7 Corruption and Touting

Illegality was reported in two forms: traffic police soliciting bribes from vehicle crews; and touts (outlawed by the Traffic Act) extorting fees from vehicle crews. Touts position themselves at common passenger pick-up points and demand money from drivers for any passengers boarding their vehicle. They were reported to become rowdy and prevent boarding when the vehicle crew refuses to pay. It was expected that CFC systems would prevent or limit money extortion from matatu drivers and conductors since there would be no on-board cash.

4.4 Implementation Challenges

Respondents were asked of their experience and challenges with the CFC systems. The CFC systems were described by interview respondents as having been beneficial.

Passengers did not have to worry about carrying cash, and vehicle owners described increased revenue from a more transparent farebox. However, uncoordinated and independent operation led to problems.

4.4.1 Cards and Their Usage

There were no reports of education and sensitisation programs carried out among users. Passengers did not know where to get the CFC cards from and how to use them, and neither were drivers and conductors familiar with the system. There was no direct way for passengers to know what balances were left on their cards, and how and where to load them. Drivers had to contend with the different cards in use, and vehicle owners needed to sign-up with different CFC initiatives. In some locations, the card reader signal reception was weak, thus delaying or failing to make the transaction.

The employment status of drivers, as well as fare structures and levels, remained unresolved. Some vehicle crews started faking faulty card readers to have an opportunity of taking cash, others charged users double by taking the fare from the card and then taking cash as well. Conductors sometimes intimidated passengers who insisted on paying by card. These events led passengers to revert back to a preference for cash payment. Further, the traffic police, had little interest in enforcing the CFC regulations because this would remove the bribes they received.

4.4.2 Settlement of Operator Fees and Commissions

Despite the government regulation for interoperability, there was no agreement by the banks to have a single swift mode of receiving and settling vehicle owners' claims. Each bank had its own commission and charges policy that remained unharmonized. If, for example, one vehicle owner had an account in bank 'X' and was signed in with initiative 'A' which is not supported by bank 'X', then this vehicle owner was not sure when the due funds would be in their account and what charges would be subjected to the transfer through bank 'X' to the bank where their account is held. It was reported that banks had varying charges for commissions, which ranged from 5 to 7%, which were considered a burden on vehicle owners who had to initially invest in the acquisition and installation of CFC equipment.

Similarly, there was no education and sensitisation of SACCOs and individual vehicle owners regarding the formal employment of salaried vehicle crews. This left drivers uncertain of how and when they would receive their remuneration. Vehicle crews, accustomed to siphoning off daily cash farebox revenue, did not favour salaries and CFC systems that prevented farebox leakages.

4.4.3 Data Management

Data collection (particularly passenger travel data), sharing and usage became one of the critical issues, particularly noted by KBS. There was no formal understanding on how the CFC-generated data should be managed, with the external agencies unwilling to share data with local partners. This information could be used by government to widen the tax net. It was noted that the paratransit sector, with a fleet of ~80,000 vehicles on the road per day, generates ~KES 0.5 billion (~ZAR 82 million) a day (Respondent 02 interview, 27 August 2019). It was not established in interviews why external agencies were unwilling to share CFC-generated data.

4.4.4 Trust and Technology Adoption

Respondents reported that, because of the long experience of cash handling in the sector, there was little trust among the vehicle owners that the CFCs would operate effectively and that they would be able to receive their expected fees. The CFC system was also seen as a limiting factor in freely and indiscriminately setting their fares. There was thus reluctance in taking up CFC by vehicle owners on the routes where piloting was being conducted.

4.4.5 Cash as a Facilitator of Bribery and Collusion

Cash was reported to be a facilitator of both drivers bribing traffic police to avoid fines or arrest when a traffic law is broken, and traffic police soliciting bribes from drivers even when no traffic law has been broken. Respondents reported a culture and a state of entitlement amongst traffic police. The same was reported of touts, who demanded, sometimes forcefully, cash for passengers to board from certain stops and ranks. With the usage of CFC systems, there would be limited or no cash in the hands of the vehicle crews, and traffic police and touts were alleged to have used their power to push vehicle crews into sabotaging the CFC systems. Cartels of vehicle crews were also alleged to have colluded to undercut the fares of CFC-compliant vehicles. Therefore, because the 2014 legal notice on comprehensive CFC adoption was not enforced, those who had taken up CFC were outcompeted by those who had not.

4.5 Reasons for Failure

Respondents reported that the CFC systems failed to take hold due to a combination of complex issues, from planning through to implementation.

Firstly, there was no consultation directed at understanding the sector, and the needs of different stakeholders. The drivers of the CFC initiatives considered only a few stakeholders' needs. One respondent noted:

“[The CFC system] ... never worked and could not work because ... there was never proper participation in the implementation of the cashless and there were a lot of unaddressed issues on salaries and how our people were to be paid salaries because we do not have contracts” (Respondent 04 interview, 29 August 2019).

Secondly, CFC was resisted because of the behavioural and cultural issues that have grown over time as a result of cash operations in the paratransit industry. Other respondents noted:

“We have a very entrenched culture of doing things especially when it comes to public transport in terms of using cash and it needed a bit of time to get people out of that and start facing the new way of doing things” (Respondent 05 interview, 30 August 2019).

“A worker in matatu would want to break the law intentionally knowing that they have money which does not belong to me, because I'll bribe my way out because of no accounting system and at the end of the day you get his salary...” (Respondent 02 interview, 27 August 2019).

Thirdly, as noted in the previous section, CFC initiatives were met with subtle resistance and ruinous competition. Some vehicle crews with CFC equipment faked faulty card readers or forced passengers to pay with cash. Other vehicle crews and owners without CFC equipment formed cartels to undercut the fares of compliant competitors.

Fourthly, each CFC initiative was supported by an independent bank, and there was no consensus on a single clearinghouse and harmonisation of commissions, thereby undermining interoperability.

Lastly, despite being among the initiators of CFC and later issuing regulations, government did not take a sufficiently active role in establishing and consolidating CFC through, for example: CFC compliance enforcement; creating a dedicated CFC regulating agency; or subsidising the acquisition of CFC equipment.

5. CONCLUSION

This paper set out to report on an explorative study of matatu stakeholders' experiences in initiating CFC in Nairobi. The aims of the study were: to establish who initiated the CFC projects, and what the expectations and challenges of key stakeholders were; and to test a proposition that there are diverse stakeholders in the paratransit industry with differing interests, and that an inability to satisfy these differing interests in CFC projects will lead to failure.

With regard to the first aim, it was found that there was no common, sole initiator of CFC projects, but rather a mixture of foreign private sector agencies, local paratransit operators and government agencies. Stakeholder expectations included: interoperability of systems; the generation demand and supply data; increased tax compliance; standardised fares; prevention of farebox leakage; salaried employment of vehicle crews; and a reduction of police bribery and tout extortion. Implementation challenges included: a lack of knowledge on how the system worked; weak enforcement of CFC regulations; no interoperability across different cards; an unwillingness to share CFC-generated data; and a lack of trust.

With regard to the second aim, the study identified as many as 46 stakeholders in the CFC initiatives, of which 18 were identified as key, in so far as they have the proximity, urgency and power to render the system inoperable if their needs are not met sufficiently. Reasons for failure included: no prior consultation directed at understanding the sector; vehicle crews sabotaged their on-board CFC equipment; vehicle crews and owners without CFC equipment formed cartels to undercut the fares of compliant competitors; no single clearinghouse or harmonisation of bank commissions; and government did not take a sufficiently active role in establishing and consolidating CFC.

The experience of CFC initiation in the Nairobi matatu industry affirms the multi-stakeholder complexity of the paratransit sector. Successful establishment of CFC in this sector, will require a multi-pronged approach involving key stakeholders, capable of understanding and balancing their interests.

6. ACKNOWLEDGEMENTS

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APPENDIX A: STAKEHOLDER ATTRIBUTE RATING SCALES

Power/influence rating (1-4)

Rating	Description/meaning of a rate given
4	Very high power: high capacity to formally instruct change in operations/ can have work stopped
3	High power: some capacity to formally instruct change/must be consulted or has to have approval
2	Fairly low power: significant informal capacity to cause change
1	Low power: relatively low capacity to cause change/cannot generally cause change

Proximity rating (1-4)

Rating	Description/meaning of a rate given
4	Very high proximity: directly involved in public transport operations/working most of the time
3	High proximity: routinely involved in public transport operations/part-time involvement
2	Fairly low proximity: detached from operations but has regular contact with or without input into operations
1	Low proximity: relatively remote from operations/does not have any direct involvement in the operations

Urgency (value – how much stake in public transport or its outcomes) (1-5)

Rating	Description/meaning of a rate given
5	Very high: has great personal stake in public transport outcomes (success/failure)
4	High: public transport outcomes are important (benefit or threat to self or organization)
3	Medium: has some direct stake in public transport outcomes
2	Low: is aware of public transport outcomes and has an indirect stake in public transport outcomes
1	Very low: very limited or no stake in public transport outcomes

Urgency (action- a measure of likelihood to take action-positive or negative to influence public transport outcomes) (1-5)

Rating	Description/meaning of a rate given
5	Very high: self-activated – will go almost all the way to influence public transport outcomes
4	High: likely to make significant effort to influence public transport outcomes
3	Medium: may be prepared to try to influence public transport outcomes
2	Low: has the potential to influence outcomes
1	Very low: unlikely to try to influence public transport outcomes

APPENDIX B: IDENTIFIED STAKEHOLDERS AND ATTRIBUTE RATINGS

Stakeholder	Involvement in daily operations	Power / influence (1-4)	Proximity (1-4)	Urgency – value at stake (1-5)	Urgency – likelihood of taking action (1-5)	Score
Association of Bus Operators (ABO)	direct	high (3)	high (3)	very high (5)	very high (5)	16
Banks	indirect	fairly low (2)	fairly low (2)	high (4)	low (2)	10
Boda-boda (BB)	indirect	low (1)	high (3)	medium (3)	very low (1)	8
Central Organisation of Trade Unions (COTU)	indirect	fairly low (2)	fairly low (2)	high (4)	high (4)	12
Citi Hoppa Bus company (CHB-co)	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
Commuters (Coms)	direct	high (3)	very high (4)	very high (5)	low (2)	14
County government (CG)	direct	high (3)	high (3)	very high (5)	very high (5)	16
Cyclists	indirect	low (1)	fairly low (2)	high (4)	very low (1)	8
Drivers and conductors (D&C)	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
European Union (EU)	indirect	low (1)	low (1)	medium (3)	medium (3)	8
Federation of Public Transport Operators (FPTO)	indirect	high (3)	fairly low (2)	high (4)	high (4)	13
Insurance companies (Ins-co)	indirect	low (1)	fairly low (2)	high (4)	very low (1)	8
International Transport Federation (ITF)	indirect	low (1)	high (3)	medium (3)	low (2)	9
International Monetary Fund (IMF)	indirect	low (1)	low (1)	medium (3)	medium (3)	7
Japan International Cooperation Agency (JICA)	indirect	low (1)	low (1)	medium (3)	medium (3)	8
Kenya Bus Service (KBS)	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
Kenya National Highway Authority (KeNHA)	indirect	high (3)	high (3)	very high (5)	high (4)	15
Kenya Anti-Corruption Commission (KACC)	indirect	low (1)	low (1)	low (2)	very low (1)	5
Kenya Motor Repairers Association (KMRA)	indirect	low (1)	fairly low (2)	high (4)	low (2)	9
Kenya Private Sector Alliance (KEPSA)	indirect	low (1)	fairly low (2)	medium (3)	medium (3)	9
Kenya Vehicle Manufacturers Association (KVMA)	indirect	low (1)	fairly low (2)	high (4)	medium (3)	10
Kenya Rural Roads Authority (KERRA)	indirect	low (1)	fairly low (2)	high (4)	very low (1)	8
Kenya Urban Roads Authority (KURA)	direct	fairly low (2)	high (3)	very high (5)	very high (5)	15
Association of Matatu Operators Kenya (AMOK)	direct	high (3)	very high (4)	very high (5)	very high (5)	17
Matatu Transport Vehicles Association (MTVA)	indirect	high (3)	high (3)	high (4)	high (4)	14
Matatu Welfare Association (MWA)	direct	very high (4)	high (3)	high (4)	high (4)	15
Matatu Workers Union (MWU)	indirect	fairly low (2)	fairly low (2)	high (4)	high (4)	12
Ministry of Education (MoE)	indirect	low (1)	low (1)	medium (3)	medium (3)	8
Ministry of Health (MoH)	indirect	low (1)	fairly low (2)	medium (3)	medium (3)	9
Ministry of Transport (MoT)	indirect	high (3)	high (3)	very high (5)	very high (5)	16

APPENDIX B: Cont'd

Stakeholder	Involvement in daily operations	Power / influence (1-4)	Proximity (1-4)	Urgency – value at stake (1-5)	Urgency – likelihood of taking action (1-5)	Score
Matatu Owners Association (MOA)	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
Nairobi Central Business District Association (NCBDA)	indirect	low (1)	fairly low (2)	high (4)	medium (3)	10
Nairobi Metropolitan Area Transport Authority (NaMATA)	direct	very high (4)	high (3)	very high (5)	very high (5)	17
National Parliament (NP)	indirect	fairly low (2)	fairly low (2)	high (4)	high (4)	12
National Road Safety Trust (NRST)	indirect	fairly low (2)	fairly low (2)	high (4)	medium (3)	11
NGOs	indirect	fairly low (2)	fairly low (2)	high (4)	high (4)	12
National Transport and Safety Authority (NTSA)	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
on-demand transport companies	indirect	low (1)	very high (4)	very high (5)	high (4)	14
Police	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
Public Transport Operators Union (PTOU)	indirect	fairly low (2)	high (3)	very high (5)	high (4)	14
Savings and Credit Cooperatives (SACCOs)	direct	very high (4)	very high (4)	very high (5)	very high (5)	18
Safaricom (Safcom)	indirect	low (1)	fairly low (2)	medium (3)	low (2)	8
Touts	direct	high (3)	very high (4)	medium (3)	medium (3)	13
Transport Workers Union (TWU)	indirect	fairly low (2)	fairly low (2)	high (4)	high (4)	12
Vehicle parts sellers* (VPS)	indirect	fairly low (2)	fairly low (2)	high (4)	very low (1)	9
World Bank (WBank)	indirect	low (1)	low (1)	medium (3)	medium (3)	8