Paratransit in African Cities

Public transport systems in contemporary Sub-Saharan African cities are heavily reliant upon paratransit services. These services are defined as informal transportation which operates between the public and individual private spheres. In Africa paratransit is characterized by low quality of vehicles and chaotic management but it also provides cheap, accessible and flexible transport solutions for the urban poor. It is typically poorly regulated and operates as a set of informal businesses. A common result of weak public sector regulation and a fare strategy in which owners claim a fixed daily revenue target and drivers who keep the variable balance as income, is destructive competition and poor quality of service. There is an incontrovertible case for improving the quality, reliability and coverage of public transport systems, and some city governments have attempted to do so by initiating reform projects that envisage the phased replacement of paratransit operations with formalized bus rapid transit systems.

In this book the authors argue that there are, however, path dependencies and constraints that limit the possible extent of public transport system reform. Paratransit operations also have some inherent advantages with respect to demand responsiveness and service innovation. Attempts to eradicate paratransit may be neither pragmatic nor strategic. Two future scenarios are likely: hybrid systems comprised of both paratransit and formally planned modes; and systems improved by upgrades and strengthened regulation of existing paratransit services. The business strategies and aspirations of incumbent paratransit operators in three case cities – Cape Town, Dar es Salaam and Nairobi – are discussed, as well as their attitudes towards emerging public transport reform projects. International experiences of hybrid system regulation and paratransit business development are reviewed in order to explore policy options. The authors contend that policies recognizing paratransit operators, and seeking contextually appropriate complementarity with formalized planned services, will produce greater benefits than policies ignoring their continued existence.
Paratransit in African Cities

Operations, regulation and reform

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Chapter 12

Strategy options for paratransit business development and service improvement

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1 Introduction

Given the significant challenges to large-scale paratransit replacement identified earlier in this book, it is evident that Sub-Saharan African cities are likely to depend, for decades to come, on paratransit modes. This chapter explores some new directions taken by paratransit in the case cities, and considers potential strategies for developing paratransit businesses and improving the availability and quality of their services. At times these strategies are driven by the paratransit operators themselves, and at others by the relevant local or national authorities. Some are in early stages of implementation, so their usefulness is not yet fully understood. All, however, serve to demonstrate the dynamism and innovation potential of the paratransit sector.

The chapter begins with an overview of key identified challenges within the paratransit sector, and looks more closely at the circumstances under which paratransit owners are most likely to respond positively to initiatives aimed at overcoming these challenges. The chapter then considers a number of strategy options or measures that could enable paratransit business development or improve the delivery of paratransit services, using examples from the case cities where possible. These options include: business organization and consolidation; measures to improve operations, such as cashless payment systems, vehicle management systems, speed governors and other information communication technology (ICT); driver development and business training; business diversification and the generation of additional income streams; vehicle renewal incentives, such as loans for vehicle purchases and repairs; and measures to improve the operating environment, such as infrastructure provision and road space prioritization. Only a few of these measures have been implemented for any length of time, and many of the potential measures identified are therefore under-researched with respect to the benefits they can or have yielded.
Few peer-reviewed papers have evaluated the performance of these strategies or their contribution to business development and service improvement. This chapter therefore draws on a variety of sources, from documented papers where available, to media articles, media releases, and interviews with stakeholders. There are limited quantitative data, or programme/project monitoring and evaluation processes, that can assist in an analysis of business development and service improvement strategies. This lack of data could be attributed to the informal or survivalist nature of paratransit ownership and operations itself, or that, within a context where BRT is regarded as the solution, there is little incentive to evaluate paratransit improvement options. What does seem to emerge, however, is that strategies that are in some sense punitive, and involve increased public sector vehicle monitoring and regulation, are met with some level of resistance.

2 Developing paratransit businesses

As previous chapters have shown, the paratransit sector is largely a fragmented, cash-based system, characterized by its demand-responsiveness, unscheduled services and individual ownership of vehicles, with few contracts in place, no operating subsidies, and a wide variety of management styles. Demand-responsiveness within the paratransit industry – the flexibility to change operations quickly in order to meet changes in demand – is likely to be accompanied by a disinclination to adhere to the restraints imposed by transport regulatory policy, city planning (including road use), traffic safety regulations and more general legal requirements (such as conditions of employment and the payment of taxes). In the Kenyan case, this disinclination has been termed ‘selective compliance’, i.e. complying with rules and regulations only when compliance is in line with the matatu business’s own operating strategies (McCormick et al. 2014).

In recent years, there has been growing concern among transport authorities and other stakeholders about increasing road congestion in Sub-Saharan African cities, as well as the structural incentives for poor driver behaviour and aggressive competition for passengers, unsafe operations, poor security, a low level of service (including long waits and lack of vehicle comfort), unfair labour practices, and poor relationships with both customers and public authorities. Further, the aged and imperfectly maintained paratransit fleets have significant impact on air quality and carbon emissions. Many Sub-Saharan African cities are being suffocated, both economically and literally, by a transport system that is becoming steadily more dysfunctional.

Given the adversarial histories and distrust of authority prevalent in many cities, however, and the informal nature of business practices, strategies for improvement that are aimed primarily at strengthening public sector regulation and control are unlikely to receive widespread acceptance. Any such strategies need to recognize that the paratransit industry is a struggling one, operating
Table 12.1 Categorization of non-punitive measures for improving paratransit services

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<td>● Business skills training</td>
<td>● Road space prioritization (including MBT lanes, queue jumpers, signal priority)</td>
<td>● Cooperative loans (including vehicle purchases and repairs)</td>
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<td>● Business diversification (including fuel, tyres, insurance, financial services, advertising)</td>
<td>● Embayments (including signage) (not dealt with in this chapter)</td>
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<td>● Consolidated driver recruitment and management (including pax. complaint systems, driver discipline, vehicle crew uniforms)</td>
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Note
* This category is dealt with in chapters 8 and 11.
and surviving on marginal profits and struggling against excessive operational and institutional problems. Thus, strategies aimed primarily at improving the profits and income security of owners have the greatest prospect of success. In some instances, improved public regulation and control may be a by-product of these improvements. Strategies that recognize the vulnerable status and independence of paratransit owners and drivers, and look to contextually appropriate complementarity with formalized planned services, need to be explored and implemented, despite initial setbacks or failures, and the at times slow level of acceptance on the part of paratransit owners.

2.1 Consolidation of fragmented business owners

As this book demonstrates, small-scale individual ownership has enabled paratransit in African cities to develop over the past 50 years or so in an adaptive and flexible manner; owners are able to offer service at fares that remain relatively inexpensive. Operating practices, however, often fall short of what might be desired by customers, other road users, and the city authorities representing the community as a whole. In the eyes of regulating authorities, it is this fragmented and irregular nature of its operations, unconstrained by corporate management structures, that has rendered the paratransit industry difficult to manage.

A hallmark of Kenyan paratransit consolidation is the cooperative, while in South Africa, route associations have a longer history. Whatever the form, there are clear benefits to consolidations from the management of fare fluctuation and competition and the raising of finance, to bulk purchasing, and the ability to enter into some form of contracting.

The major drive towards consolidation in Kenya came in November 2010, when the Ministry of Transport acting through the Transport Licensing Board issued a directive compelling all public transport operators and individual owners of public transport vehicles to form or join either Savings and Credit Cooperatives (SACCOs) or limited liability companies in order to secure or renew their operating licences for the year 2011. After some initial resistance, the directive took hold and the process of consolidation began; eventually all the operators were operating under a SACCO or a company, though still fragmented because some SACCOs and companies had only a few vehicles. The Ministry later set the minimum size for each company or SACCO at 30 serviceable vehicles. This resulted in further consolidation as some small companies and SACCOs merged in order to reach the required minimum.

Kenya has a long history of cooperative development, especially in agriculture, where cooperative societies have been especially active in the marketing of cash crops, milk, and other agricultural products (Wanyama 2009). SACCOs were mainly channels through which employed persons could save and borrow. The first transport cooperative, 2NK (pictured in Figure 12.1), was established in 1994 (http://2nksacco.co.ke/). It was voluntarily
formed by operators in order to pool their resources, save and borrow money, and reduce the intense competition that had previously characterized their routes. The early SACCOs were formed by inter-city operators based in the same region, but later were successfully replicated by intra-city paratransit operators in cities such as Nairobi.

By 2010 when the directive to form SACCOs was announced, some SACCOs had already begun to regulate and coordinate the activities of their members, manage routes, and in some cases pay drivers’ salaries, vet new drivers, and monitor driving behaviour. In other SACCOs these managerial functions were still largely in the hands of the vehicle owners.

Each transport SACCO sets its own rules and procedures, within the broad provisions of the Co-operative Societies Act. Generally, however, members make daily contributions, sometimes calculated per vehicle trip; in some SACCOs, members are allowed to increase their contributions if they wish. Contributions are banked every day, at any branch of the Co-operative Bank. This capital is the basis for member loans, which fall into three broad categories: emergency loans for repairs and maintenance; general loans for any other purpose such as health care and school fees; and for the purchase of assets. Emergency and general loans have a lower ceiling, and are subject to the member’s accumulated contribution (usually, a member must have contributed...
for at least six months); the limit for an asset-purchase loan is usually twice the member’s accumulated contribution.

Some of the better established SACCOs own their own vehicles, and the revenue from operations is distributed to the members through dividends. In Kenya the SACCOs diversify beyond transport operations or financing, into businesses that include fuel stations, insurance agencies, courier services, vehicle repair and maintenance, and tyre sales and repairs as well as purchases of property and shares. One large SACCO even offers ‘front office’ financial services equivalent to those of banks. Such services are subject to additional regulations through the SACCO Societies Regulatory Authority (SASRA) to ensure the safety of deposits.

The organization of transport operators as SACCOs has brought many benefits to the members. SACCOs are credited with bringing some order to the sector, in terms of self-regulation and safety (Gicheru 2011), helping members to save and borrow from the cooperatives, and acting as a guarantor to the member in need of a loan from the Co-operative Bank. The bank also gives loans to SACCO members at an interest rate slightly lower than the market rates. Being able to save and borrow has made matatu businesses better investments, because the operators are able borrow not only for vehicle repairs and maintenance, but also to meet other personal emergency needs, without having to dip into the working capital of the matatu business.

![Image of MTN SACCO offices in Murang'a, Nairobi, April 2014. Credit: Roger Behrens.](image-url)

*Figure 12.2* MTN SACCO offices in Murang'a, Nairobi, April 2014. Credit: Roger Behrens.
Some SACCO officials have also reported that cooperative measures have translated into increased passenger comfort, a decrease in road collisions, a decrease in inter-industry competition and conflict, and increased profitability. Belonging to a SACCO has enabled operators to act collectively on concerns regarding routes, traffic violations, and other matters affecting their businesses (McCormick et al. 2011a, b).

Much less is known about the company form of matatu business consolidation. Owners are permitted to form ordinary companies, in which all of the vehicles are owned by a single company, or a management company or franchise. In theory, the ordinary company is just that, a private limited company that invests in vehicles as its main assets and sells transport services to the public. The company obtains the operating licences for the vehicles and operates them along the routes specified in the licenses. All management is in the hands of the company officials. In practice, what seems to be the case so far is that there are variations in the management of such companies. Only a handful of companies may fall into this category. There is also, for example, the management company model which contracts with vehicle owners to manage their vehicles on their behalf. Management in this case includes different functions, such as monitoring the daily operations, arranging for service and/or repairs, and training drivers and conductors in customer care.
Finally there is the franchising model, which is focused on marketing the brand (McCormick et al. 2014). The individual vehicle owner (the franchisee) contracts with the owner of the matatu brand (franchisor) to be allowed to use the owner’s brand on his/her vehicle. The franchisor owns the brand and allows the franchisees to use it by paying a fee and abiding by the contract conditions. The contract usually contains specific conditions around use of the brand: the logo must be painted on the vehicle in a certain way, drivers and conductors must behave in particular ways, and the nature and frequency of vehicle maintenance are specified. In some cases, the franchisor provides support to enable franchisees to meet these requirements. For example, one franchise company in Nairobi offers training for drivers and conductors and operates its own vehicle workshop. In the Nairobi case, the fact that only higher capacity vehicles are allowed to enter the central business district (CBD), has meant that franchise and management companies tend to specialize in these vehicles in order to gain valuable access. The franchisor or the management company then passes on or sells such rights to the various franchisees for a fee.

The limited research in this field makes it difficult to answer the most pressing questions: Have these forms of paratransit consolidation improved the efficiency of operations? and Have they resulted in more organized public transport systems with better services to the travelling public? Although full answers are not yet available, some ongoing research among inter-city matatu shuttle services in Kenya suggests that SACCOs have had positive benefits both for the individual businesses and for the organization of the previously fragmented transport sector. Consolidation through SACCOs, management companies, and franchising, therefore, appear to be an organizational experiment worth supporting.

Transport-related cooperatives have not found traction in South Africa, perhaps because until the mid-1990s cooperatives were largely restricted to the agricultural sectors (Theron 2008), and for bulk-buying purposes. It may also be because in South Africa vehicle financing seems to present less of a challenge to paratransit operators, with a number of companies, such as SA Taxi and Taxi Choice, not only facilitating loan agreements with financial institutions, but ensuring that the vehicle has an operating licence.4

South Africa’s National Taxi Task Team (NTTT),3 which submitted findings in 1996, set up a Co-ops for Taxis group in 1998–99, but these failed to last the course. A KwaZulu-Natal Provincial Government initiative, launched in 2001, to set up 11 paratransit co-ops, also stalled (Browning 2006) – the paratransit industry was to have used its collective buying power to enter the manufacturing industry, tyre distribution, fitment and parts centres as well as property development around taxi ranks and affordable finance schemes (Vapi 2001). In South Africa, with its history of apartheid and disenfranchisement, there remains a high level of suspicion and distrust with regard to government (Ahmed 2004), and industry sources suggest that it is this distrust, coupled with
in-fighting among the taxi associations, that was a primary cause of the failure of these early attempts at formal consolidation.

South Africa does have a history of voluntary paratransit associations, however, with their origins soon after deregulation in 1987 (Sekhonyane and Dugard 2004), organized according to route or area of trip origin. Formalized as a consequence of the findings of the NTTT in 1996, these Route Associations are now required to prepare a constitution and a code of conduct, and register with a Provincial Taxi Registrar, hold annual general meetings, prepare audited financial statements, and establish mechanisms for the management of grievances and internal disciplinary processes (Ahmed 2004).

More recently, South African regulatory authorities have taken an approach to paratransit reform that typically includes the desire to ‘consolidate operators into capable entities and provide business planning support to ensure they are able to provide high quality services under contract’ (NDoT 2007), and an insistence that ‘taxi operators [paratransit owners] form and become shareholders in operating companies which in turn provide network services [largely, the new BRT systems] to the transport authority in terms of a formal performance contract’ (NDoT 2007). The assumption is that formalized, corporate entities are more able to negotiate contracts and discounts, or apply for business assistance, credit, or working capital, than individual operators not integrated into recognized structures or urban industries. While the obvious corporate entity is that of the proprietary company, to which paratransit operators would contribute their vehicles in exchange for proportionate shareholdings, a cooperative is a possible alternative. There is no reason a voluntary Route Association could not, on a decision by its members, form a cooperative, a company, or any other type of formal, consolidated group. The intention of a cooperative is to enable small-scale enterprise by making it easier for a group to form a corporate entity. In South Africa, cooperatives are easier to form than proprietary companies, and the corporate governance requirements are less than for a company. The cooperative model provides (in theory at least) opportunities for greater participation and low-risk involvement by the individual member. This would undoubtedly help in overcoming the fear of a paratransit or minibus-taxi operator that he or she is committing to something over which he or she will have little control. Furthermore, cooperatives allow for self-policing, an important attribute where there is distrust of the state authorities.

A proposal to create a cooperative as a precursor to a more corporate structure was developed in 2009 in Nelson Mandela Bay Metro (NMBM) in the Eastern Cape Province (see Box 5.1). The leadership of the paratransit industry there recognized the depth of opposition toward paratransit reform and incorporation into a Bus Rapid Transit system, and produced a strategic plan to deal with the apprehensions of existing taxi operators and the challenges of consolidation or corporatization, proposing a period of transition with safeguards at each phase of the transition. The critical interim phase was
to be one in which the individual operators retained a greater measure of autonomy, and ownership of their vehicles, but ceded them to the cooperative for purposes of management under the contract with NMBM. Once it had become clear that government guarantees were being met, and that they could trust one another as cooperative members, ownership would be transferred to the cooperative. This would pave the way for the conversion of the cooperative to a joint-stock company. This company in turn would be in a position, if it seemed commercially desirable, to form a joint venture with the larger bus operating companies.

By November 2010 the Steering Committee had developed its proposals to the stage where it was able to present them to the national Deputy Minister of Transport. Five cooperatives had by that time been formed, one for each of the groups of routes to be included in a contract with NMBM. These had in turn formed a ‘secondary’ cooperative to negotiate with NMBM. Progress, however, was impeded by the murder (unsolved) in 2010 of the leader of the negotiating body, the Taxi Forum, and concerns over the administration of start-up funds provided to the secondary cooperative.

While cooperatives in South Africa, at least, have been less successful than business strategists have hoped, there does seem to be room for perseverance, and re-evaluation regarding lessons learned: the matter of misuse of funds in Nelson Mandela Metro suggests that the legal entities should not be formed until a contract is ready to be signed; and that perhaps assistance to the negotiating bodies could be in kind (e.g. office accommodation, professional advice) rather than in cash.

2.2 Business skills training

Earlier chapters have identified a lack of knowledge and education within the paratransit sector in all three case cities, ranging from a lack of basic literacy and numeracy, to insufficient knowledge regarding traffic rules and regulations, safe driving practices, vehicle maintenance and vehicle replacement, the importance of savings, or business, customer-care and operations skills. Education and training could go some way toward mitigating these concerns and improve the service offered to paratransit customers. One of the key gaps in business planning and the logical outcome of a survivalist business model, for example, is the failure of operators to take into account vehicle depreciation costs and to set aside money to replace vehicles.

In South Africa a number of business skills development opportunities exist, specifically for the paratransit industry. The National Department of Trade and Industry, for example, offers start-up assistance to approved entities (the development fund will provide 90 per cent of the start-up costs for approved entities, and the members will need to contribute 10 per cent). Funding is largely for matters such as business planning, however, with the department funding the service provider directly rather than the entity.
SA Taxi, a major minibus-taxi financier and developmental credit provider, offers free business training to their clients. According to Bonisile Makubalo, director of Corporate Affairs at SA Taxi, ‘most operators are astute managers of cash flow in a cash-based industry, but gaining an ability to understand an income statement and other business fundamentals gives them the tools with which to measure, and therefore improve, their success as business people’. In early 2014 SA Taxi launched two insurance products, Khusela Taxi Insurance and Khusela Taxi Business Insurance, aimed at ‘making taxi operators sustainable by making it easier and more affordable for them to keep their vehicles safely on the road and earning money’.

In 2012, Taxi Choice (the business wing of SANTACO, the national government-supported South African National Taxi Council) founded a bi-monthly free magazine, TaxiNdaba, aimed at minibus-taxi operators and drivers. The magazine has a stated education and training purpose: ‘to be a catalyst for economic development in the taxi sector through … sharing valuable business information and laws that affect the industry and the sector, and providing critical financial, business and investment planning advice to all entrepreneurs involved in this sector’.

To date, however, the authors have been unable to source examples of follow-up studies regarding the outcomes and impact of such training programmes, such as increased customer satisfaction, improved driving skills and reduced road crashes or fatalities, or the rate of take-up and success of

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Figure 12.4 TaxiNdaba magazine (www.taxindabamag.co.za) is ‘a distinctively and unapologetically taxi industry focused trade magazine, published bimonthly and distributed free of charge, with particular emphasis on the taxi business entrepreneurs in the first instance, the industry’s drivers and other employees and the commuting public that it serves.’
taxi-specific insurance products. Case studies cited in Chapter 5, however, revealed that operators with formal training in management or finance were better managers of both financial and human resources than those without such training.

2.3 Business diversification

Earlier chapters have suggested\textsuperscript{12} that behind many of the paratransit sector’s weaknesses lies the drive to maximize individual profit within a ‘survivalist’ business context. As a paratransit operator quoted in Chapter 8 (Section 4.2) puts it: ‘Most of our people run from hand to mouth.’ A case could certainly be made, then, that additional sources of income could improve the financial stability of paratransit firms or entities and improve vehicle quality and comfort; further, if additional income were to accrue to the drivers, this might reduce the pressure to participate in extra-legal practices or to engage in dangerous profit-maximizing behaviour (ranging from reckless driver behaviour and low levels of compliance with safety regulations, to unroadworthy vehicles, aggressive competition, refusing to carry pensioners and students at discounted rates, and charging additional fees to disabled customers, for example).

2.3.1 Outdoor and mobile advertising

On-vehicle, in-vehicle, and rank advertising have been observed in both Kenya and South Africa as a strategy to generate additional income. According to a media release issued by SANTACO in 2013,\textsuperscript{13} an agreement between SANTACO and advertising company ComutaNet has resulted in ComutaNet being given preferential access to all SANTACO-managed taxi ranks nationwide – 95 per cent of all South Africa’s ranks. Philip Taabosch, secretary-general of SANTACO, is quoted saying that the partnership is part of SANTACO’s vision to ‘empower the industry in general and individual operators in particular’. SANTACO and Primedia Outdoor (holding company of ComutaNet) will share the revenue generated by the rank advertising.

Minibus-taxi vehicles also serve as mobile advertising platforms, although in South Africa there is some confusion regarding the strict legality of this strategy. The South African government (Government Gazette 2006, Regulation 8542) has stated that ‘all mini and midi buses operating in terms of an operating license shall be branded accordingly: all mini- and midi-buses will be white in colour with the national flag on the sides’. Nevertheless, the concept of full or half exterior wrap advertising, back windscreen advertising, as well as interior branding, have clearly been embraced by the paratransit sector.

SA Taxi has set up a new company, SA Taxi Media, specifically to facilitate vehicle advertising. According to an SA Taxi media release,\textsuperscript{14} the impetus behind the establishment of SA Taxi Media was that fact that ‘operators often struggle to make their taxi businesses successful. … It costs operators a great
deal of money to keep their vehicles safe and operational, because commuters are feeling the financial squeeze, operators cannot simply increase their fares to cover their own escalating costs. Through its vehicle tracking system (which tracks vehicles financed by SA Taxi), SA Taxi Media is able to provide advertisers with a precise, daily, auditable report of where their adverts are being seen, according to the media release.

Although to date the authors have been unable to source from SA Taxi Media or other agencies the extent and impact of additional advertising revenue on paratransit businesses, interviews with operators and drivers do suggest that this strategy has significant potential. In one example, a taxi driver who has been in the taxi industry since 1987 in Cape Town, says vehicle advertising does generate extra income for a taxi owner (and is often put toward payment of vehicle purchase instalments). When a taxi owner signs up for an advertising contract, he could receive, for example, a down-payment of around ZAR 1,300 (USD 130 in 2014) and thereafter R600 every month for a six-month contract. The income through advertising only benefits the paratransit operator, however; some vehicle drivers work on a 30 per cent commission of the fare box earned by the taxi owner and thus additional revenue does not necessarily reach the driver. Advertising conditions could include that the vehicle is required to be roadworthy, and on the road every day for the duration of the contract.

Figure 12.5 A minibus-taxi advertising the brand Corn Flakes, on Klipfontein Road near Athlone, Cape Town. August 2014. Credit: Rodger Bosch.
2.3.2 **Bulk purchasing discounts and additional revenue streams**

In Nairobi, it is fairly common for SACCOs to diversify beyond transport operations or financing (McCormick *et al.* 2011a and b). For example, fuel stations, insurance agencies, courier services, and tyre sales are services offered at a fee to members and the public. SACCOs also purchase land, buildings, and vehicles, and individual members share this ownership according to their share contributions, like any shareholding in a private company.

In Cape Town, Zenzeleni Kamva is an example of a local taxi association that has played a similar role to the Kenyan SACCOs: employing the strategies of cooperative purchasing power, training and skills development, revenue diversification, and contract operations. It also exemplifies, to some extent, the challenges to business development where unethical or fraudulent practices, short-term thinking, and inadequate management skills are all too common, and where multiple factors coincide to thwart a potentially successful enterprise.

In 2004, the Khayelitsha-Mitchells Plain Taxi Association (south-east Cape Town) started a business support company called Zenzeleni Kamva ("Build a Future for Yourselves"), to supplement their fare box income. Soon after its establishment, they attempted to purchase a disused fuel station in Khayelitsha. Unable to raise initial finance from a commercial bank, the company directors

*Figure 12.6* The MTN SACCO sells tyres from a site adjacent to their offices in Murang’a, outside Nairobi. April 2014. Credit: Roger Behrens.
asked each member to contribute ZAR 10 per taxi per day; once they had collected ZAR 250,000 they returned to the bank with a deposit, and were granted a loan of ZAR 1.6 million, partially subsidized by the bank’s agreement with a development agency that provides finance for black-owned small and medium enterprises (Lali 2008).

According to the company, despite initial losses due to theft and fraud, the company’s turnover grew from ZAR 13 million in 2006 to ZAR 38 million in 2007, and ZAR 45 million in 2008. By 2009 the fuel station was providing for at least 250 minibus-taxis, as well as for private car owners.

The company’s second venture – the purchase of two long-distance buses to carry passengers between Cape Town and the Eastern Cape – was unprofitable, but a later venture, the purchase of upmarket vehicles for tourism travel, proved more successful. Directors had learned from their initial lack of auditing, market research, and oversight skills, according to the company, and attended business skills training with the University of the Western Cape.

It would seem, however, that ‘politics’ was to get the better of the venture. According to taxi umbrella body CODETA (Congress of Democratic Taxi Association) in Khayelitsha, the venture was not supported by the entire CODETA membership. Infighting over profits and management tactics led to the closure of the company in 2009.

Fuel stations offer perhaps the obvious choice as either a purchased asset or as a partner in a bulk-purchasing scheme. In an association-specific programme in Cape Town, in early 2014, 18 route associations affiliated to CODETA teamed up with a fuel station in the area in which they operated, and agreed to purchase fuel from this station alone, in return for a cut in the increased profits. The fuel station owner Heyder Ebrahim reported: ‘It’s good for us to go into marriage with the taxi bosses. We have the facilities and space to accommodate their fitment centres. And it brings business for us,’ adding that as MyCiTi bus [the City of Cape Town’s BRT system] would probably operate in the area soon, it would reduce the ‘taxi bosses’ profits’, so this ‘branching out will bring back some profits if they will lose out to MyCiTi’. He said there was an agreement in place with the taxi bosses to fuel their fleet of taxis at his petrol station and when they had filled up a certain amount of fuel ‘we are going to reimburse them a certain amount’.

Loyalty programmes are essentially reward systems that encourage loyal consumer behaviour – particularly behaviour that is able to benefit the organization offering the programme. Rewards include discounts, or points that may be redeemed for future purchases. In August 2012, SANTACO announced a loyalty card programme, aimed at its 130,000 members; somewhat like that of the Kenyan SACCOs, its goal was consolidating the association’s buying power. According to Nkululeko Buthelezi, SANTACO business development executive, the initiative has not been as successful as they hoped, but ‘the programme is still on the cards’ and reconceptualized as part of the electronic fare collection system (see below). Paratransit operators would use the card
to purchase goods at parts or fitment stores, as well as to obtain financial services. SANTACO therefore intends to relaunch the programme in late 2014 if possible, with microchip-cards to enable members to load money, purchase from partner retailers, or pay their fares.

3 Improving the operating environment

The provision of Rights of Way (RoW) or dedicated lanes, and the provision of rank infrastructure as well as improved non-motorized transport (NMT) facilities are three infrastructure interventions particularly likely to improve service levels offered by paratransit operators. The costs of such developments and infrastructure would need to be borne by the relevant government authority.

3.1 Investment in rights-of-way

The difference between travel in mixed traffic and having one’s own lane is probably the single biggest service improvement than can be made to any public transport offering: it moves service from simply being another vehicle in a traffic stream, to a higher level. Right-of-Way (RoW) improvement is the first step in what can become an ever more engineered system: somewhere in between a paratransit vehicle in mixed traffic and stopping haphazardly, and rail rapid transit, is a range of performance and design features.

- RoW C: vehicles run in mixed traffic (the vast majority of Sub-Saharan African paratransit and most large-bus routes)
- RoW B: vehicles run with lateral separation but crossing intersections (such as Rea Vaya BRT in Johannesburg and MyCiTi BRT in Cape Town)
- RoW A: vehicles run with total grade separation (rail rapid transit systems and most regional railways).

Another form of RoW enhancement is preferential traffic signal control, or Traffic Signal Priority (TSP). This is technically easy to achieve with RoW B, since only public transport vehicles are on the lane. It is more difficult with RoW C, as non-public transport vehicles may be in the queue ahead of eligible vehicles. An intermediate solution is to implement in-queue bypasses at intersections, which requires that the space at corners be available and that the use of this space only for authorized vehicles be respected.

The upgrade to a higher level of RoW, with perhaps the addition of features such as TSP, can dramatically improve the speed and/or reliability of vehicles running on that RoW. But the more important questions when assessing performance are (1) the overall improvement experienced by the user from his/her origin to destination, (2) any reductions in total operating cost, and (3) any reductions in total energy consumption and emissions.
Uncoordinated systems tend to provide good service to a few focal points, such as a CBD. A better network can open further destination possibilities in the same amount of total travel time and can boost ridership at the same total system operating cost (Thompson and Matoff 2003). So integrating paratransit operators into a higher capacity ‘backbone’ or trunk-feeder service could be an important medium- to long-term goal of any reform. However, the conditions under which this actually saves time for the users or total expenditures by both government and users are more limited than in the case of richer countries, since labour costs are much lower in Africa. So careful analysis and a detailed vision for the future are both necessary when deciding to make such a conversion (Del Mistro and Bruun 2012).

In South Africa, RoW in the form of a high occupancy lane (referred to as a Bus-Minibus-Taxi, or BMT, lane) was first introduced in Cape Town in 1995, a partnership between the City of Cape Town and Provincial Government of the Western Cape. The business case for the RoW centred on time savings for BMT vehicles and commuters. This 7-km stretch along the N2 freeway into Cape Town’s CBD was located in the median lane of the three-lane carriageway. Enforcement (onsite) proved unsuccessful, however, and the lane was soon discontinued.

The incoming BMT lane was reintroduced in August 2007, this time using Intelligent Transport Systems (ITS) to assist enforcement, and with an additional 4 km continuing the lane east toward the dormitory towns of Mitchells Plain and Khayelitsha. Lane reservation was in place for morning peak traffic from 5.30 a.m. to 9 a.m. (Tichauer and Watters 2008). Enforcement was by means of Closed Circuit Television (CCTV) and Automatic Number Plate Recognition (ANPR) technology, with 17 stations along the length of the BMT lane at an average spacing of 750 m.

A month after opening, BMT vehicles were experiencing an average travel time saving of 19 minutes; against all expectations, the general traffic also experienced improved travel times, of just over five minutes during morning peak (Tichauer and Watters 2008).

Within the first month of operations, the number of BMT commuters increased by between 28.1 per cent and 32.9 per cent, and overall the total number of commuters (general commuters and BMT commuters) increased by between 12 per cent and 15 per cent. Without increasing the number of vehicles, the implementation of the BMT lane resulted in the number of commuters using the N1 increasing by almost 12,000 (24.3 per cent) during the morning peak period, with no drawbacks or lack of benefit to general vehicles as a result of less friction between the general and BMT vehicles.

The CCTV cameras were turned off in September 2010 because, according to the Provincial Minister (MEC) of Transport, they were ‘not effective enough’ and drivers were able ‘dodge’ them and avoid detection. In October 2012, the City introduced a new stretch of BMT lane on Main Road (southern suburbs, also CBD inbound).
In January 2013 the authorities reactivated the cameras on the N2 BMT lane – motivated by the City’s vision to ‘deliver efficient and safe integrated, intermodal and interoperable public transport that gives a genuine alternative to privately owned car transport’ (CoCT 2013).

The N2 lane reduces travelling time from the dormitory township of Khayelitsha to the CBD by about 23 minutes, and the Main Road lane southern suburbs by 10 minutes, leaving little doubt about the effectiveness of RoW interventions and the impact they have on both public and paratransit service.

3.2 Investment in interchange facilities

The provision of safe, effective, physical transfer of public transport users between vehicles offers a further opportunity for paratransit service improvement. In many locations, this would imply larger taxi rank areas, station areas sufficient for bypassing by large vehicles, traffic flow controls for smooth access and egress by the operators, and safe interactions with non-motorized transport (walking and cycling). Some of these changes can be done at minimal expense; international experience strongly indicates that political and road agency resistance to inconveniencing car users are often the restraining factors.
Figure 12.8 The Claremont Public Transport Interchange, with signage directing passengers toward facilities, September 2014. Credit: Rodger Bosch.

Figure 12.9 A minibus-taxi drives past the Claremont Clinic, developed as part of the Claremont Public Transport Interchange, Cape Town. September 2014. Credit: Rodger Bosch.
The significant upgrade of the Claremont transport interchange, in Cape Town, is an example of a public–private partnership development that aimed to improve the management of the Claremont CBD, improve access to the area and mobility within the area, enhance the physical appearance of the neighbourhood as well as improve ‘competitiveness’ with other city CBDs. The Claremont Improvement District Company (CIDC) raises funds through levy contributions, private investments, and public/private investments.19

The new Claremont Public Transport Interchange, which caters for more than 30,000 public transport commuters every day, was opened in October 2008 – after an investment contribution from the City of Cape Town of ZAR 38 million (the CIDC contributed R20 million). The interchange includes a health clinic as well as a taxi and bus terminal. The terminal has parking for 10 buses, 66 loading bays, and 35 holding bays for minibus-taxis. Improved facilities for informal traders are due in 2014.20

Of the above budget, ZAR 500,000 was spent on refurbishing toilet facilities at the taxi rank and general maintenance in terms of cleaning, weeding the surrounding area, fixing benches, and installing an irrigation system. Improved lighting and additional seating is being procured (2014).

A 2010 study (Verster 2010) surveyed satisfaction levels among interchange users, and compared them to 2004 (pre-upgrade) data: in 2004, Claremont Public Transport Interchange (PTI) had the highest dissatisfaction rate of all six PTIs in Cape Town, when users were questioned about matters of safety and security, the pedestrian environment, signage and wayfinding, ablution facilities, adequate seating, and shelter. In 2014, there was a satisfaction rating increase of 20 per cent, when users were questioned specifically about the same concerns.

4 Improving paratransit service operations

An integrated ticketing system – usually by means of a smart or pre-paid card – across transport modes in a city or region could prove to be one of the most effective actions in an incremental approach to improvements in both existing paratransit and public transport services. At present, in the case cities, there is little transferring between modes, as Chapter 2 has noted; the preference for direct services could be because a full fare has to be paid each time a passenger transfers, contrary to international best practice. Although an integrated system would require expenditure at a time when paratransit operators are concerned about lack of or inadequate subsidies or profit, it would also obviate the need for cash-fee collection, reduce fraud, and enable improved record-keeping and revenue collection by the paratransit operators. A precursor to integrated ticketing, however, is a cashless, smart card system.
4.1 Smart card technology

Kenya has led the way with smart card technology, where in 2010 the Nairobi-based Red Arrow Bus Service (a formal bus service) used smart cards to collect fares based on point-to-point distances. The smart card points of sales were at some popular chain stores within the city and at the bus station where the buses were allocated a terminal. They also used GPS technology for tracking the vehicles and the movement of passengers in and out of each vehicle. The owners of Red Arrow Bus Service came to the Nairobi public transport market after 20 years of fleet management, operations, and maintenance experience and a background in project finance and transportation technology, and launched the service in 2009. Although Red Arrow did not survive in the market, and the owners returned to the vehicle-hire business, smart card technology requirements have become entrenched in Kenyan regulations.

In Kenya, cashless payment systems were to become mandatory for public transport services on 4 July 2014, but press reports soon indicated that compliance was likely to be low (Standard Newspaper, 2014). The regulation has since been relaxed and the new deadline for the implementation is December 2014 (Daily Nation, 22 September 2014).

According to a senior Ministry of Transport official, the aim of the regulation, which is contained in the National Transport and Safety Act, 2012, is to reduce or eliminate the amount of cash handled by matatu crew, and thus eliminate the bribes routinely paid by drivers to police officers. As a further benefit, the cashless system is expected to reduce the escalating cases of touts disappearing with money belonging to matatu owners or passengers. The press also suggests the cashless system will enable easier regulation of the matatu tax base (Business Daily, 11 October 2013).

Among the cashless payment options are the BebaPay cards, a Google product (‘beba’ means ‘carry’ in Swahili), where customers are able to top up at an Equity Bank or a BebaPay agent, and the local SACCOs product MY1963 partnering with Fibre Space Ltd and sponsored by Kenya Commercial Bank. Other cashless cards introduced are the Abiria Card, rolled out by Kenya Bus Services and sponsored by the Co-operative Bank of Kenya, and Metro Card, sponsored by Pesa Print (Business Daily, 30 April 2014). So far the cashless cards introduced are not compatible with one another, but plans are underway to enable the interchangeable use of all methods of cashless payment. Card receipts show card balance, as well as the registration number of the vehicle used and the name of the conductor (Kioko 2014). Cards can be topped up with cash or by using M-Pesa (‘pesa’ is Swahili for ‘money’), a mobile phone-based money transfer system, supported by Safaricom and Vodacom mobile telephone providers.

The benefits of a cashless system to matatu business owners are fairly clear: it is likely to reduce theft and ensure that the business owners receive at least most of the fares collected, and remove the possibility of fare-setting by the
crew. Operational concerns have been raised, though, about the low levels of
digital literacy among matatu passengers, as well as the erratic data network in
Nairobi and Kenya as a whole.

In Cape Town, the Cape Town Peninsula Taxi Association (PTA) became the
first to introduce a smart card electronic payment system in the Western Cape
province in February 2012. The smart card payment system TAP-I-FARE
was a MasterCard PayPass, which allowed commuters to pay for their taxi fares
by card instead of cash. As a pilot project, the card system was implemented
with 5,000 cards and in 42 vehicles that ran the CBD to V&A Waterfront route
(a round trip of some 12 km). The cards were not compatible with either the
Cape Town or Johannesburg Bus Rapid Transit (BRT) services. The vehicles
had wireless hand-held devices upon which the cards were swiped; the card did
not eliminate the use of cash, but gave commuters another option.

But despite the TAP-I-FARE electronic payment system bringing more
income to taxi owners, it was discontinued in 2013 following the City of
Cape Town’s implementation of its MyCiTi BRT service along the same
route, according to PTA’s secretary Albertus Ebrahim, who is also a director
at TransPeninsula Holdings – one of the MyCiTi bus Vehicle Operating
Companies (VOCs).

‘We started off (with TAP-I-FARE) slowly but gradually picked up as
commuters liked the electronic payment system,’ says Ebrahim. ‘There was a
conflict eventually after the City implemented the MyCiTi bus on our route
from the City centre to the Victoria and Alfred Waterfront (V&A).’ He did
say, however, that the electronic payment system had tremendously reduced
fraudulent practices on the part of taxi drivers.

Drivers on this route worked on a 30 per cent commission of the total
amount earned by the operator; before, with no clear monitoring system,
drivers could (and did) earn more than the operators at times. A system such
as TAP-I-FARE, which showed how many trips a driver made and kilometres
travelled, proved useful for the operator. However, the system was not without
its challenges: the validators (the mobile card-swiping mechanism) needed
to draw from the vehicle batteries in order to operate, and some of the
taxis were old and their battery power could not support the validators. At
times the validator would drain the vehicle battery and consequently switch
off, frustrating commuters who had loaded funds on the TAP-I-FARE
MasterCard, as they were forced to pay cash.

The charges for hiring the validators were also ‘too high’, reducing the
potential profits for the operator, said Ebrahim. Additionally the banks were
‘frustrating’ and viewed as uncooperative in that they charged commuters
loading fees. ‘Banks took a substantial chunk of the service fees and penalized
commuters who forgot to tap out.’

Since the electronic taxi fare payment system has been discontinued, it is
difficult for a vehicle owner to calculate trips made per day and how much
money a driver made. ‘If taxi owners were to implement permanently the
TAP-I-FARE, the driver would earn a salary and the taxi owner would make huge profits. We were able to see the true reflection of how much a taxi driver made per day,’ he says.

Within SANTACO, there is now a movement toward promoting smart card systems, with the commercial wing of the council, Taxi Choice, talking of fitting smart card and tracking technology to every taxi in South Africa. In mid-May 2014, it was reported that Taxi Choice hopes to use electronic management systems to provide taxi entrepreneurs with some relief within the context of fuel increases and lack of subsidization.

‘A card effectively takes cash out of the vehicles,’ says Thulani Qwabe, deputy managing director of Taxi Choice. He cites a pilot smart card project, which found around 34 per cent of takings was stolen by drivers (sometimes 50 per cent). ‘Clearly this does not work for operators, who have to take the risk of running the vehicle, but make less money than they should be making … Cash is difficult to manage and control.’

The goal of Taxi Choice is to ‘find a way to make the business of running a taxi much more profitable, and by removing cash from the taxi vehicle, we automatically do so,’ says Qwabe. A further benefit is that drivers will be paid a wage, operators will have sufficient profit to offer benefits, and drivers will have less incentive to drive recklessly in pursuit of customers. The goal is to have 10,000 taxis using the system within three years, ‘resulting in owners earning as much as ZAR 700 extra every day’.

Tracking technology is packaged with the fare collection equipment, which will allow the operator to trace and track his or her vehicles at any given time, says Qwabe, and ‘to uncover the secret trips and reasons why wear and tear is higher than expected, for example’.

### 4.2 Digital speed governors and fleet management systems

Digital speed governors and electronic tracking systems are two ICT interventions that promise to help vehicle owners to manage their income and expenditures. ICT might seem an obvious mechanism, in addition, by which to collect supply and demand data relating to the paratransit industry and to assist route allocation and licensing. However, if used by the relevant authorities to monitor or enforce compliance with licensing conditions, such technology might be met with suspicion. Where improved profits and income security are the outcome, the acceptance and success of such interventions are more likely.

Interviews with vehicle owners and SACCO officials in Nairobi suggest that there is certainly support for the use of digital speed governors. The speed limit for matatus is 80 km per hour, and speed governors are designed to enforce such limits as well as to record trip and other data related to use. The operators are of the opinion that there is generally less wear and tear on the vehicle as a result, and the fuel consumption is reported to be less than when the same vehicles were not using speed governors. However, for inter-city
vehicles, the main disadvantage is that because of slower vehicle speeds, the trips take longer, which results in fewer trips and reduced daily takings (McCormick et al. 2014).

Fleet management often includes tracking, driver management, and fuel management. Companies and SACCOs with tens or hundreds of vans, buses, or minibuses can benefit from digital systems, which usually involve a device installed in each vehicle that then relays information about the vehicle’s location, speed, route, and fuel consumption. The system is capable of producing reports that assist the owners in improving efficiency, raising productivity, monitoring driver behaviour, and reducing overall operating costs.

With the installation of a fleet management system, the operators can track the vehicles using mobile phones as well as laptop or desktop computers. An individual owner can view information about a single vehicle, while the SACCO or transport company can track multiple vehicles. The reporting function allows owners to monitor changes over time. In addition, the system reduces cases of drivers going off route, stopping, etc. It provides a way of verifying what drivers tell owners; monitors time; monitors speed; and data can be used in a court of law as evidence in cases where the driver is accused of exceeding the speed limit or of causing a minor crash. Electronic tracking is also a security benefit in case of breakdown or crash as it provides the SACCO or owner with the exact location of the vehicle.

In 2013, the Kenyan government made the installation of digital speed governors mandatory (Kenya Gazette 2013). It also required installation of GPS fleet management for vehicles licensed to travel at night (McCormick et al. 2014). There was fairly widespread agreement in the matatu industry that too many new costly pieces of equipment were being required in a short time. Opinion on the value of these investments seems to be mixed, with some clearly seeing their advantage to owners and SACCOs, and others, especially drivers, preferring the freedom to set their own speeds.

4.3 Passenger information: mapping of paratransit routes

Since a strength of the paratransit sector has been its flexibility and responsiveness to customer demand, it may be that with updated and more accurate information about passenger supply and demand, in theory, operators could and would make more informed choices about route design and optimization, with time saving at least one outcome for passengers.

In practice, however, once licensed for a particular route, operators in both Cape Town and Nairobi cannot change to any other route that may have a higher demand at any time or period. A possible innovation is a system whereby routes are ‘tweaked’ regularly, every few months, instead of whenever the route licence comes up for renewal. This tweaking would be frequent in the next few years as the route and travel time information reveals itself, and less frequent once the major improvements and rationalizations
Figure 12.10 The Digital Matatu Project – a map of matatu routes. Credit: digitalMatatus.
have been made. Now that smartphones and other technology are revealing routes, demand levels, and operating conditions, regulations limiting operating licences or concessions to a single rigidly defined route for a long period of time are perhaps obsolete and slowing down improvement to networks.

Paratransit mapping projects have been attempted in all of the three case cities – the most successful of which is the Digital Matatu Project, where researchers, students at the University of Nairobi, Columbia University, and MIT produced a map of matatu routes after carrying cell phones and GPS devices along every route in the network. The data were published using open format General Transit Feed Specification (GTFS), a common format for public transportation schedules that allows the data to be used for travel apps and system modelling.

A similar effort was made in Dar es Salaam by an MIT Transit Research Group student, Anson Stewart, on a visit to the city in 2011. His result is a high-quality online version (as a one-off project, it may not be regularly updated). In Cape Town there have been official and unofficial attempts at mapping minibus-taxi routes, the most recent (www.taximap.co.za) of which includes useful information regarding routes, ranks, and fares for passengers new to minibus-taxi travel.

A more immediate outcome of digital mapping may be the attraction of new passengers, perhaps tourists or visitors, or people who currently use other modes.

4.4 Improving the customer experience

4.4.1 Wi-Fi onboard

In April 2013, mobile network operator Safaricom launched an onboard Wi-Fi service, Vuma Online, servicing 1,000 matatus and buses on the Nairobi–Mombasa routes. The service costs matatu operators Tsh. 2,000 per month, and customers are able to use it for free (Mbuvi 2013). According to press reports, matatu operators believe that the offering will give them ‘an edge over intense competition for passengers’ (Mbuvi 2013).

South African minibus-taxis now are able offer a similar service, with in-vehicle 3G and 4G Wi-Fi routers. This system, spearheaded by Taxi Choice and technology partner Wi-Taxi, had at the time of writing completed a successful pilot implementation phase (between April and May 2014) involving 1,500 taxis at 50 taxi ranks in Gauteng. Wi-Taxi’s target for monthly installation of Wi-Fi routers in every member vehicle is in the order of between 4,000 and 5,000 per month, with completion expected for 2017.

The Wi-Fi routers currently offer commuters a modest 50MB of free Wi-Fi connectivity per month courtesy of Telkom, South Africa’s national telecommunications operator, with the option to purchase more from Telkom when this is depleted. If Taxi Choice’s target is reached, approximately 15 million
paratransit commuters in South Africa will enjoy access to Wi-Fi for the length of their commutes. A spin-off of the project is the creation of Wi-Fi hotspots at taxi ranks, since the technology projects Wi-Fi beyond the vehicle in a 15–20m radius.33

Universal Wi-Fi access in taxis could enable data collection, fleet management, and live traffic monitoring, among other applications, but for the moment, Wi-Taxi’s target is simply the roll-out of basic connectivity. The immediate benefit for drivers and business owners is the relative appeal that Wi-Fi holds for passengers; at a later stage, the system could be used to verify drivers’ reports of distance covered, and thus to enhance financial accountability between vehicle owners and drivers.

Installation and maintenance of the routers is provided by Wi-Taxi at no direct cost to the vehicle owners, meaning that the owner or driver’s only responsibility is a nightly charging of the Wi-Fi router, which has a rechargeable lithium battery that lasts for 10 hours (it can also be charged via the vehicle’s own 12-volt cigarette lighter plug-point). The technology has the potential to transform the average 45-minute South African minibus-taxi commute from lost time to productive time. According to Wi-Taxi CEO Brian Mdluli,34 within days of roll-out, a Wi-Fi-enabled taxi carrying 14 passengers included between 8–10 who were logged in at any given time.
4.4.2 Driver training

In South Africa, the national Transport Education and Training Authority (TETA) offers a National Certificate in Professional Driving (NQF 3), and a new taxi industry qualification, ‘National Certificate: Taxi Driver’, is being proposed. The professional driver training includes being able to ensure commuter safety and comfort, adhere to scheduled times and service quality specifications, and collect revenue for services. Improved commuter services, commuter safety, and commuter comfort lead to improved customer service and profitability, decreased human and economic costs due to injury and damage, and improved professional image of the transport sector.

Professional drivers are also able to study toward a qualification in customer relations, where they learn to ‘interact professionally with customers’. ‘Improved customer relations leads to improved customer service, which, in turn, results in business growth and profitability,’ according to TETA. ‘Professional driving services are improved, thereby improving the image and profitability of the field of transport services.’

![Image of Ms P.T. Maxakatho with her certificate after receiving training through the Toyota Advanced Driving (TAD) Academy, March 2012. Credit: Arrive Alive/brandhouse Number One Taxi Driver Campaign.]

**Figure 12.12** Ms P.T. Maxakatho with her certificate after receiving training through the Toyota Advanced Driving (TAD) Academy, March 2012. Credit: Arrive Alive/brandhouse Number One Taxi Driver Campaign.
Certainly transport authorities in South Africa are hopeful that the training programmes will have the outcome envisaged by TETA. ‘The taxi industry has been making headlines for all the wrong reasons and it is about time that it moves away from this,’ said the provincial minister for Transport, Limpopo Province, at an award ceremony for vehicle drivers in 2010.40 ‘We cannot stand to hear our people complaining about the poor service that they get from the drivers in that they are perpetually rude and drive recklessly on the roads thereby putting commuters’ lives in danger. We hope that the education that the drivers have received will help transform the industry so that it occupies its rightful place in the economy of our country.’

5 Conclusion

Paratransit is a major mode of transportation in each of the three case cities presented in this publication: Cape Town, Nairobi and Dar es Salaam. Each city authority wishes to improve the quality of their public transport, including its safety, reliability, customer satisfaction, and affordability. Yet while the
relevant authorities consider a number of mechanisms for paratransit regulation or replacement, the paratransit industry itself has begun to pay increasing attention to its own shortcomings as well as its strengths. Until recently, paratransit in Sub-Saharan African cities could be said to have reached ‘a state of stasis and maturity’, with limited opportunities for further growth in its present form (Venter 2011). For many operators, their concerns were less about growth and more about protecting their position and limiting new entrants on to their turf, particularly if change required investment in equipment or an added management burden to the operator as owner-investor (Browning 2006). This position is changing rapidly, though, with this chapter attempting to keep pace with the increased appetite for innovation within the industry. It could be that the advent of bus rapid transport has spurred the paratransit sector into contemplation and action.

In South Africa, this inward focus has taken the form of SANTACO’s TR3 2020 Taxi Strategy, a ‘roadmap’ that focuses on ‘restructuring’, ‘redefining’ and ‘repositioning’ the ‘taxi business’ in order to project the image of a formal entrepreneurial activity (SANTACO 2010). Many of the strategies for business development and service improvement discussed in this chapter are identified in this ‘roadmap’.

The chapter has described a number of strategy options that could enable paratransit business development and improvement of the quality of paratransit services, whether initiated by the regulating authority or by the operators themselves. That the strategies in the chapter reflect the South African experience in greater detail is not necessarily an indication of more significant strategic action in that country, but instead reflects the greater availability of information. Peer-reviewed work is limited in this regard in all three countries, and rigorous evaluation and impact assessment is rare – highlighting an important future research need.

The effectiveness or potential of any strategy will depend on the local operating environment, institutional capacity, and the priorities of the public transport stakeholders; the paratransit industry does not operate in isolation from the broader social economy or other urban political agendas. Within operating contexts that are at times violent, and corrupt, opportunities for business development and service improvements are limited. Any strategy will need to take governance and regulatory frameworks, reform proposals and enforcement practices, the relationship between operators and authorities, and the political and financial climate into account. A number of initiatives have showed initial promise, but have been terminated as a result of external factors or because of challenges that could be overcome under different circumstances, with the necessary strategic, technical and institutional support. Cashless payment systems for instance are, in one example, recommencing under a different regulatory and supportive environment.

The strategies presented in this chapter are thus not necessarily appropriate in every city context, nor are there sufficient evaluation data to enable the
authors to reach firm conclusions regarding the viability or effectiveness of any particular strategy. What this chapter does conclude, however, is that persistence in the implementation of multiple strategies offers the best potential for improved outcomes in multifaceted contexts. From the available peer-reviewed literature, the impact of upgrades to rights-of-way seems to offer significant opportunity for service improvement, although this is a strategy that requires substantial public sector or institutional investment. There is surely little doubt, however, that a paratransit sector less dependent on daily passenger revenue takings, with greater opportunities to accumulate capital and accessing credit, would have more room in which to reflect and act on the strategies most likely to support their own development and improvement. It does appear that through greater operator consolidation, judicious use of technology, business diversification, and education and training, the paratransit sector is eager as well as able to move into the ‘first’ economy and do some way towards providing the safe, reliable, affordable, quality transport service cities and customers need, while generating a profit for themselves at the same time.

Notes

1 Competition regulation (including quality licensing in an open market, quantity licensing (including area and route licensing), concessioning, franchising, and contracting) as a strategy to improve paratransit services is dealt with in Chapters 5 and 10.
2 As Christo Venter (2011) notes, informal public transport has historically been regarded as “a problem to be solved” by government, official attitudes towards informal operators ranging from passive toleration to outright hostility.
3 The Co-operative Bank of Kenya was initially registered under the Co-operative Societies Act in 1965, and in 2008 incorporated under the Companies Act.
4 Interview conducted with Thulani Qwabe, deputy managing director of Taxi Choice, 24 July 2014.
5 The NTTT was set up in response to escalating violence between taxi associations in competition for lucrative routes. The Task Team proposed three pillars of government intervention: regulation and control, formalization and training, and economic assistance. The founding of SANTACO (the SA National Taxi Council) and the Taxi Recapitalization Programme are two further outcomes of this process (see Chapter 8).
6 Indeed, the Cape Town-based Peninsula Taxi Association (PTA), with 150 members, formalized DATE to become Peninsula Holdings and entered into a number of contracting services, including the University of Cape Town’s student shuttle service, and the City of Cape Town’s MyCiTi bus (see Chapter 8).
7 Media release: ‘SA Taxi is key to business expansion for taxi entrepreneurs: savings is where the first and second economies meet’, 15 July 2014.
8 Media release: ‘New SA Taxi insurance product is game changer’, 24 February 2014.
9 As Chapter 8 notes, SANTACO might not necessarily be representative of associations’ and operators’ attitudes and interests, however, and thus ventures led by this body might not necessarily offer the most effective strategies for consideration.
10 *Indaba* is a Zulu word meaning ‘business’.
11 www.taxindabamag.co.za/about/ (Accessed 4 September 2014).
12 Particularly in Chapters 3, 6, and 7.
13  24 July 2013.
15 Personal interview conducted by Peter Luhanga, 17 March 2014.
16 Interview conducted by Peter Luhanga, February 2014.
17 Interview conducted by Peter Luhanga, February 2014.
18 ‘Cape Town’s BMT cameras are duds’, Clayton Barnes, 13 January 2012, www.iol.co.za/motoring/industry-news/cape-town-s-bmt-cameras-are-duds
19 www.cide.co.za
21 Interview carried out May 2014 by Dorothy McCormick and Risper Orero.
23 Interviews conducted by Peter Luhanga, 19 March 2014.
24 VOCs were formed by taxi associations affected by the roll-out and implementation of the bus service – see further, Chapter 8.
25 As do the smart card systems used by BRT services.
26 Cape Town and Johannesburg BRT services expend significant communication effort in reminding users to ‘tap out’.
28 Telephone interview, 24 July 2014.
29 Personal interviews for joint research project entitled: Savings and Credit Cooperative Organizations (SACCOs) as Operational Arrangements for Matatu Management: Case Studies from Kenya’, carried out by R. Orero and D. McCormick, April–October 2014.
30 Wi-Taxi is a private company established in 2013. The partnership with Taxi Choice is part of Santaco’s TR3 2020 strategy for the long-term vision of the R40-billion South African taxi industry, which also envisions the transformation of the industry into a ‘corporate entity governed by corporate laws’ under a centralized administration.
32 Brian Mdhluli, CEO of Wi-Taxi, telephone interview by Brett Petzer, 4 July 2014.
33 Brian Mdhluli, CEO of Wi-Taxi, telephone interview by Brett Petzer, 4 July 2014.
34 Brian Mdhluli, CEO of Wi-Taxi, telephone interview by Brett Petzer, 4 July 2014.
35 TETA is responsible for the ‘development, endorsement and implementation of a national Transport sector Skills Plan and also ensures the development and implementation of partnerships (a variation on the apprenticeship concept), skills programmes, qualifications and other transport related training interventions throughout the industry’. It was established in March 2000 in accordance with the South Africa Skills Development Act No. 97 of 1998. The ‘taxi industry’ is one of eight transport sub-sectors within TETA.
37 Foster and Maintain Customer Relations – Unit Standard 123258.
38 Foster and Maintain Customer Relations – Unit Standard 123258.
40 Key Note Address by MEC for Transport at the Taxi Driver Skills Development Ceremony, Ms Pinky Kekana, 21 July 2010. www.ldrt.gov.za/?p=750
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