# PARATRANSIT OPERATIONS AND REGULATION IN NAIROBI MATATU BUSINESS STRATEGIES AND THE REGULATORY REGIME

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# ABSTRACT

Nairobi's matatus – privately owned paratransit vehicles – are businesses offering a service to the public. Matatu owners adopt business strategies that they hope will ensure them a continuing place in the market and a reasonable reward for their efforts. Matatus operate within a regulatory regime that has the potential to promote or to thwart their strategic objectives. Using case studies of fifteen matatu businesses operating on selected routes in Nairobi, this paper examines the relationship between matatus' business strategies and the current or proposed regulatory regime. Research findings suggest a relationship between both overall and operating strategies and the nature and level of regulatory compliance. It also found that compliance is selective, with operators following regulations deemed to be reasonable and possible. The findings suggest that compliance may be enhanced by promoting cooperation between matatu owners and government in streamlining regulations and ensuring fair and consistent enforcement, as well as by recognising that matatus are legitimate transport businesses rendering a public service.

# 1 INTRODUCTION<sup>1</sup>

Nairobi's matatus – privately owned paratransit vehicles – are businesses offering a service to the public. Matatu owners adopt business strategies that they hope will ensure them a continuing place in the market and a reasonable reward for their efforts. Matatus operate within a regulatory regime that has the potential to promote or to thwart their strategic objectives. The research reported in this paper used case studies of 15 matatu businesses to examine the link between matatu business strategies and the nature and

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<sup>&</sup>lt;sup>1</sup> The study is part of a larger project funded by the Volvo Research and Educational Foundation (VREF) that covers various aspects of public transport in Nairobi, Dar es Salaam, and Cape Town. The researchers are grateful to VREF for financial support and to the African Centre of Excellence for Studies in Public and Non-motorised Transport (ACET) based at the School of Engineering, University of Cape Town, for the encouragement and administrative assistance that made this work possible.

level of the firms' regulatory compliance. The project's overall research question is: To what extent do firms with different strategies respond differently to actual or proposed regulations, and what are the implications of these differences for government's ability to implement change? The paper's focus is on the views expressed by the business owners, but it also benefits from earlier key informant interviews (see McCormick et al. 2011) and a range of other data sources.

The paper presents the study results in five parts. Following this introduction, part 2 draws on the resource based theory of the firm and institutional approaches to economic development to develop a conceptual framework linking resources, institutions, and business strategies, to regulatory compliance. Part 3 describes the study's methodology, part 4 details the findings, and part 5 draws conclusions.

# 2 BUSINESS STRATEGIES OF URBAN PARATRANSIT FIRMS

The analysis adopts Grant's (1991) definition of strategy as 'the match an organisation makes between its internal resources and skills and the opportunities and risks created by the external environment.' The following sections examine the components of that definition and their implications for this study of a particular type of firm performance.

# 2.1 External Environment and Internal Resources

According to the institutional perspective, the external environment of any organisation is an embodiment of rules and requirements to which individual entities must conform if they are to receive legitimacy. Institutions are 'humanly devised constraints that shape human interaction' (North 1990). A business environment is made up of many different types of institutions. A close examination of Kenya's business system identified twelve groupings, ranging from the state and markets to social institutions such as family, community, ethnicity and gender (McCormick and Kimuyu, 2007). The analysis of any particular industry will include a selection of institutions believed to have the most direct impact on the activities of that sector or subsector.

For three decades management literature has recognised the role of the firm's internal resources as the foundation for firm strategy (Wernerfelt, 1984; Grant, 1991; Acedo et al., 2006). Textbooks identify five groups of resources: human, physical, financial, knowledge and learning, and general organisational resources. The Resource Based Theory of the firm is actually a collection of theories that emphasise different types of resources (Acedo et al., 2006). The main groupings are the classic internal resources (human, physical, and financial), knowledge, and what Acedo et al., (2006) call 'relational' resources.

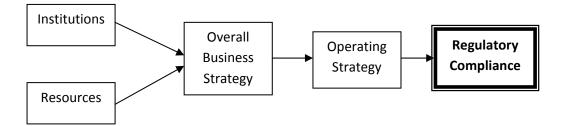
## 2.2 Strategies and Performance

Strategy allows an organisation operating in a challenging environment to configure its resources to meet the needs of the market and to fulfil stakeholders' expectations Making good use of resources, especially of a firm's distinctive competence, should lead to good performance (Mahoney and Pandain, 1992; Barney, 1991).

Performance of business firms is most often conceptualised in economic terms, using financial performance measures or competitiveness in its chosen markets. Performance need not, however, be limited to finance and markets. A firm's own goals or benefits to particular constituencies can be used to operationalise performance (Dess and Robinson, 1984). In this research, 'regulatory compliance' is the performance variable.

# 2.3 Strategy as a Framework for Analysis

National and industry institutions combine with firm resources to shape the strategies adopted by each matatu business (See figure 1). Strategy is examined at two levels. The first is the overall strategy that drives the business in the long term. The second level is the operating strategy that determines the way a firm manages its day-to-day operations. Business strategy at both levels affects the nature and degree of the firm's compliance with transport regulations.



# Figure 1: Conceptual framework

# 3 METHODLOGY

The study was carried out in two parts. The first was a scoping study designed to gather information about the matatu sector from knowledgeable observers of the sector (see McCormick et al. 2011). The second part gathered primary data directly from the matatu businesses themselves. It uses 15 case studies, purposively selected in order to capture the variety that exists among these businesses. Secondary data included published literature on urban transport, web-based materials, government documents and maps.

The cases were chosen through purposive multi-stage sampling, involving selection of three corridors from among the seven major corridors leading to and from the City, followed by selection of specific routes from each corridor, and identification of one business from each of the selected routes. The resulting sample is not intended to be representative, but to include businesses that differ from one another in resources, strategies, and levels of compliance.

The main source of primary data was a set of face-to-face interviews of business owners, which were undertaken between May and November 2011. Notes taken during the interviews were transcribed, and each member of the interview team reviewed them for completeness and accuracy. Additional primary data came from observation of individual businesses and of matatus on the road, as well as from a stakeholders' workshop in which researchers discussed preliminary findings with respondents and other key industry players. Data analysis was qualitative, using pre-determined themes, but allowing substantial scope for considering unexpected responses and observations.

# 4 FINDINGS

After a very brief description of the Matatu business owners, this section presents the findings following the sequence of the conceptual framework presented in Figure 1 above.

#### 4.1 Matatu Business Owners

The fifteen business owners interviewed for this study included 14 men and one woman. Three had only primary education, six were secondary school leavers, and six had continued their education into colleges or university. Their experience in the matatu industry ranged from two years to over 40 years. Ten of them own minibuses ranging in size from 25 to 37 seats, two own large buses, and four operate 14-seaters only. One of the minibus operators also has a 14-seater.

#### 4.2 Institutions

Many social, political, and economic institutions influence the strategies and ultimately the regulatory compliance of matatu businesses. The first phase of our research suggested that two groups of institutions play the most significant role: those government bodies whose mandate includes some aspect of transport operation and the industry's own formal and informal rules, regulations, and norms (McCormick et al., 2011).

The main *government institutions* named by case study respondents are Ministry of Transport, Transport Licensing Board, Nairobi City Council, and Traffic Police. Also mentioned were Ministry of Nairobi Metropolitan, Ministry of Roads, Judiciary, and National Environmental Management Authority (NEMA). Respondents recognised the Ministry of Transport as the originator of policy. The Transport Licensing Board is an arm of the Kenya Revenue Authority that is responsible for issuing licences to public service vehicles and assigning them to specific routes. Day-to-day enforcement of regulations is in the hands of the Nairobi City Council (NCC) and the Traffic Police. Both matatu owners and some key informants agreed that the police and the NCC enforce regulations more for personal gain than for the sake of better transport operations, and that enforcement is often uncoordinated and erratic. The result is a hostile business environment that discourages regulatory compliance.

The most important *industry level institution* is a practice that is widely used by all but the most organised bus companies: the target system. In this system, the owner sets a daily-income target for the vehicle; at the end of the day. the crew must deliver that amount to the owner. The remainder of the day's collection pays the crewmembers' salaries, fuel the vehicle, and cover incidental expenses, including payments to police and NCC. The second industry level institution is the transport SACCO. Savings and Credit Cooperative Organisations (SACCOs) are voluntary, not for profit organisations whose basic purpose is to help members to save. SACCOs generally target a particular segment of the population, such as employees of the same company, farmers in a given location, or in the current case, owners of vehicles using a particular route. Finally, for many years informal groups, some of which were actually outlawed criminal gangs, dominated the industry (McCormick et al. 2011). Although respondents reported they are still active on some routes, their influence appears to have greatly diminished following the implementation of new directives in early 2011 (R2, R5, R7, R12, R14).

#### 4.2 Resources

#### 4.2.1 Public goods

Public goods are not generally included in listings of firm resources, yet our research suggests that for the matatu industry they can be extremely important. Among the many public goods available to matatu firms, the ones most mentioned in our case study interview were roads, access to Nairobi's Central Business District, and stages and termini.

Matatu operators recognise that the condition of roads is critical to their costs and operations. At the time of the research, many City roads were in fair to good condition, but a few were very bad and others have bad spots that can create traffic jams and damage vehicles (R2, R5). Road condition has implications for regulatory compliance.

Access to Nairobi's Central Business District (CBD) is a highly valued public good. Initially only the three largest bus companies could enter the CBD; all matatus were prohibited. Now additional companies have made their way in and there is a growing sense that TLB and NCC are not handling CBD access well. 'It's an unfair practice. There are those which are allowed and those which are not' (R13).

Operators perceive the allocation and access to stages and termini to be unfair and sources of constant contention with enforcement officers. Although bus stages were designated and even gazetted years ago, the current situation is one of confusion over whether 'designated' stages exist and if so, which ones of the many stopping places in use are 'designated' (R5, R10, McCormick et al., 2011). As one operator put it, 'NCC restricts bus stops the way they want' (R11). In fact, however, the larger bus companies generally have easy access to both the old KBS stages and the roadside bays that have been added later. This gives them a resource not readily available to ordinary matatus. Termini are similarly contentious. Operators on some routes claim that they have no terminus (R4), while many, especially those assigned to Muthurwa, argue that the terminus is too small, is badly maintained, and unpopular with passengers (R5, R9, R10, R14).

## 4.2.2 Private goods

Firms own or control resources in the form of private goods. The most relevant for our purposes are financial resources; physical assets; human resources; knowledge, skills and experience; and networks and linkages. The nature and level of a matatu firm's internal resources clearly affect its choice of strategy and/or the way it is implemented (McCormick et al. 2011). Although a detailed analysis of the link between resources and strategy choice is beyond the scope of this paper, two examples illustrate this point. For example, one of our respondents with prior training and experience as a mechanic, developed a 'hands-on' approach to maintaining his vehicle (R4). Others trained in accounting and management keep detailed spreadsheets and costings for their vehicles (R6, R10).

Resources also affect compliance both directly and indirectly. For example, several of our respondents have noted that compliance is costly (R2, R14, R15). The business owner who has financial resources in the form of savings or access to loans is in a better position stay in compliance with the regulations than one who is relying only on operating income. The owner's experience, knowledge, and skills also have an impact on compliance.

# 4.3 Matatu Strategies

# 4.3.1 Overall strategy

The matatu businesses appear to have three different overall strategies (see Table 1). Seven of the business owners interviewed see themselves as being in the business of public transport. In the interviews they spoke of the importance of market forces, they recognised that their vehicles were investments that should produce a return, and they were aware of the importance of customer satisfaction. Several of these firms keep detailed accounting records for internal control purposes (R1, R2, R4, R5, R6). In addition to such general business awareness, these operators were familiar with the particular requirements and peculiarities of Nairobi's transport industry. Two of them volunteered that they had bought and read their own copies of the Traffic Act (R2, R7). Some in this group expressed an appreciation of the usefulness of branding as a way of attracting and maintaining a customer base (R1, R6). One owner spoke of doing 'market research' before setting fares (R1). Another says that he monitors his business 'like a manager' (R11).

#### Table 1: Overall strategies

Strategy	Cases
Operate a Public Transport Business	R1, R2, R4, R5, R6, R7, R11
Diversify Businesses/Income Sources	R3, R10, R13
Earn Daily Income	R12, R14, R15

#### Source: Field data, 2011

The second approach is to operate the matatu business as part of an overall strategy of diversifying income sources through employment and/or other businesses. Of the five cases in this category, one has income from employment (R12) and the other four operate other businesses. Only one of these (R13) clearly stated his aim of diversification. For the others, the strategy was deduced from their actions.

The third strategy is one of earning a daily income. One respondent put it very clearly: 'I needed daily income. I needed to set up something that would supplement my income. So I went into the matatu industry because I knew I would get a daily income from it' (R14). Another said, 'You cannot build a house or do any major investment with the earnings from the business. It is just for ensuring you have your daily bread (R12).

Two businesses gave very little indication of the nature of their overall strategy. Both of these have a long history in the business, having started as conductor, moving to driver, and eventually buying their first matatu (R8, R9). For the present, they have been omitted from the categorisation.

## 4.3.2 Operating strategy

Operating strategy dictates how a firm manages its day-to-day operations. The first phase of this research identified eight elements of the operating strategy: Financing and levels of investment; routes and vehicle type; pricing; daily operation; promotion and advertising, customer relations, and business linkages and networking. (McCormick et al., 2010). The case study interviews probed how firms dealt with each element. Our interviews revealed two types of management style. We named these 'hands-on' and 'hands-off' and categorised firms based on owners' responses to questions about each of the eight elements of matatu operating strategy.

## Table 2: Operating strategy

Hands-on	R1, R2, R4, R5, R6, R7, R8, R9, R10, R11, R15
Hands-off	R3, R12, R13, R14

Source: Field data, 2011

The hands-on manager is closely involved in the day-to-day running of his/her vehicle(s). Eleven of the fifteen case study matatu owners can be described as hands-on managers

(See Table 2). Their responses to questions about vehicle operation indicated that they were closely involved in most issues.

One owner stated his position clearly: 'Matatu is a business with problems if you do not understand it. It depends on the management. You must be there. You must involve yourself 100%' (R4). Six of the hands-on owners said that they chose their route because its proximity to their place of residence allows them to monitor the operation (R2, R3, R4, R8, R9, R10).

Others described in detail how they manage specific functions such as fuelling, maintenance, record keeping, and dealings with the police. Two excerpts from field notes provide examples of what hands-on managers actually do:

R10 has one vehicle and four workers. The first shift starts at 5.00 am and ends at 1.00 pm; the second shift goes from 1.00 pm to 11.00 pm. He does the calculations and makes sure the vehicle is filled with fuel personally. He must be there when there is change in shift.

R6 is a hands-on manager with seven vehicles ranging in size from 33 to 51 seats. Although he has committed his vehicles to a franchise company, he keeps his own detailed records of daily receipts, passenger numbers, maintenance, and fuel expenses. He does his own revenue collection and banking. If the vehicle is in trouble with the Traffic Police or City Council, he goes personally to sort the matter out.

The hands-off manager turns the vehicle over to others and takes little or no day-to-day responsibility for its management. The 'others' who actually manage the vehicle can be the crew, a management company, or a SACCO. In fact, the four hands-off managers among our cases all allowed the crew to manage their vehicles. The owners set a daily cash target, provided some basic guidelines, and left the vehicle's day-to-day management to the driver and conductor.

## 4.4 <u>Regulatory Compliance</u>

## 4.4.1 Levels and nature of compliance

During the interviews business owners were asked to comment on their compliance with existing rules and regulations governing the industry. Discussions covered government policies, the Michuki rules, labour laws, adherence to routes, issues around stages and termini, and the new requirement for organisation into SACCOs or management companies. Responses were coded to indicate low, moderate, or high compliance with individual items (See Table 3). The nature of the interviews meant that respondents did not necessarily address every item. Based on these responses, researchers made an overall assessment of each respondent's level of compliance. The self-evaluation which was recorded for most respondents is also indicated in Table 3 for comparison purposes.

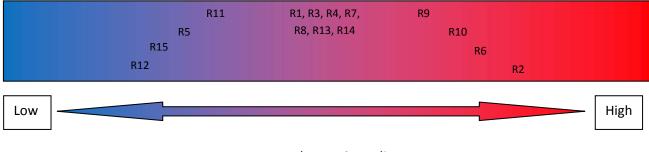
Business owners are selective in their compliance, choosing to comply in some areas and not to comply in others. For example, R7 gets high marks for adherence to routes, but low ones for crew qualification since he often resorts to using unqualified 'squad' (pool) drivers. The most common forms of non-compliance are in labour management, especially violations of working hours, and the rule that requires monthly payment of salaries. Only one of our cases claimed to be compliant in these areas (R1).

Respon-	0	BSERVED C	OMPLIA	NCE LEVEL*	SELF EVALUATION OF	
dent	Low Moderate		High Overall		COMPLIANCE	
R1	1	8	2	Moderate	'We are 90% compliant'	
R2	2	4	9	Moderate to high	Complies with all but monthly pay.	
R3	2	4	7	Moderate	None given	
R4	4	5	5	Moderate	None given	
R5	6	5	2	Moderate to low	Complies with all rules and regulations	
R6	3	3	8	Moderate to high	Buses comply with all traffic regulations	
R7	6	4	6	Moderate	None given	
R8	5	1	8	Moderate	Complies with some regulations; not others	
R9	2	4	8	Moderate to high	All traffic rules adhered to	
R10	2	2	9	Moderate to high	'As much as possible, I try to comply'	
R11	5	2	5	Moderate to low	'We try as far as possible to comply, however sometimes it is impossible.'	
R12	11	1	3	Low	None given	
R13	2	5	5	Moderate	'We try to comply. The cost of not complying is high.'	
R14	5	4	5	Moderate	'I comply in terms of licences; other times I don't.'	
R15	8	2	4	Low	'We are unable to comply with Legal Notice 161'	

Table 3: Observed and self evaluation of compliance

Source: Field data 2011

Overall, two respondents (R12 and R15) had a 'low' compliance rating. R15, who runs an old large bus, acknowledged that he did not comply with many requirements. R12 gave no overall self-evaluation of compliance, but indicated throughout the discussion that compliance with individual regulations was difficult or impossible. The remaining respondents were ranked 'moderate to low' (R5, R11), moderate (R1, R3, R4, R7, R8, R13, R14), or 'moderate to high' (R2, R6, R9, R10).



**Regulatory Compliance** 



The data creates a picture of regulatory compliance as a continuum, rather than the oftencited dichotomy of compliance or non-compliance (See Figure 2). The continuum extends from low to high compliance, with case study businesses found from the upper end of 'low' to moderate to high range.

# 4.4.2 Strategy and compliance

This study hypothesised a relationship between business strategy and regulatory compliance. Table 4 provides data for examining that relationship more closely. It suggests that compliant businesses, i.e., the four firms with 'moderate to high' observed compliance, tend to be operated by hands-on managers (R2, R6, R9, R10). Two of these have 'running a transport business' as their overall strategy (R2 and R6); one aims to diversify his business interests (R10), while the third had no identifiable overall strategy (R9). Not all hands-on managers show high levels of compliance (see R1, R4, R7, R8, R11).

The two businesses with low observed compliance (R12 and R15) have the same overall strategy, but different operating strategies. Both firms operate their vehicles to secure a daily income, but one (R12) is a hands-off manager, while the other (R15) is hands-on.

R	Overall Strategy*			<b>Operating Strategy</b>		Observed Compliance
	Transport	Diversify	Daily	Hands-on	Hands-off	-
	Business		Income			
R1	✓			$\checkmark$		Moderate
R2	✓			~		Moderate to high
R3		$\checkmark$			~	Moderate
R4	√			✓		Moderate
R5	√			✓		Moderate to low
R6	√			✓		Moderate to high
R7	√			✓		Moderate
R8				✓		Moderate
R9				~		Moderate to high
R10		$\checkmark$		~		Moderate to high
R11	√			✓		Moderate to low
R12			~		~	Low
R13		$\checkmark$			$\checkmark$	Moderate
R14			~		✓	Moderate
R15			$\checkmark$	$\checkmark$		Low

 Table 4: Overall strategy, operating strategy, and observed compliance

\* Information from Cases 8 and 9 was not sufficient to enable researchers to identify their overall strategy.

Source: Field Data, 2011

# 5 SUMMARY AND CONCLUSIONS

This paper has reported the results of the analysis of fifteen case studies of matatu businesses operating on three of the seven main corridors leading into Nairobi. Cases included very small firms with a single 14-seater matatu and somewhat larger ones operating as many as seven vehicles of different sizes. One of the study's most important findings is that the business strategies of these matatu operators are much more varied than previously thought and that this variation has implications for their compliance with existing transport regulations.

Not only are the business strategies varied, but so also is compliance. No case study firm was fully compliant, nor was any firm totally out of compliance. Firms habitually complied

with some regulations and ignored others; they sometimes complied with a given regulation and at other times found a way around it. At the firm level, we named this 'selective compliance'. At the sector level, it resulted in a continuum of compliance ranging from low to high. Two areas of the regulations emerged as especially contentious: Labour regulations requiring matatu owners to pay workers on a monthly basis, and route regulations requiring matatus on certain routes to terminate outside the CBD.

On the link between strategy and compliance, our case studies are suggestive rather than conclusive. They suggest that those who see themselves in the transport business are somewhat more likely than those with other overall strategies to comply with regulations, and that firms with moderate to high compliance tend to be hands-on managers.

Finally, the findings can be useful for those who want an improved public transport system for Nairobi. Recognition that matatus are legitimate transport businesses rendering a public service should pave the way for greater compliance. The required SACCOs may be helpful in this connection. Transport SACCOs can raise awareness of the business character of matatus, promote better management and compliance with regulations among their members, and serve as intermediaries between their members and government to ensure that both the regulations and their enforcement are fair to all stakeholders.

# 6 **REFERENCES**

Acedo, FJ; Barreso, C, and Galan, J L. 2006. "The resource-based theory: Dissemination and main trends." *Strategic Management Journal* 27:621-636.

Barney, J. 1991. "Firm resources and sustained competitive advantage." *Journal of Management.* 17(1): 99-120.

Dess, G G. and Robinson, R.B., J9r. 1984. "Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit." *Strategic Management Journal* 6(3): 265-273.

Grant, R M.1991. "The resource-based theory of competitive advantage: Implications for strategy formulation." *California Management Review*, Spring: 114-135.

Mahoney, J and Pandain, R. Jr. 1992. "The resource-based view within the conversation of strategic management." *Strategic Management Journal* 13: 363-380.

McCormick, D and P Kimuyu, 2007. "Business systems theory: An African perspective." In D McCormick, P O Alila and M Omosa (eds). *Business in Kenya: Institutions and interactions.* Nairobi: University of Nairobi Press.

McCormick, D, W V Mitullah, P Chitere, R Orero, and M Ommeh, 2011. "Institutions and business strategies of matatu operators in Nairobi: A scoping study." ACET Working Paper No. 14-2. African Centre of Excellence for Studies of Public and Non-Motorised Transport. Cape Town: University of Cape Town.

North, D C. 1990. *Institutions, Institutional Change, and Economic Performance.* Cambridge: Cambridge University Press.

Wernerfelt, B. 1984. "A resource-based view of the firm." *Strategic Management Journal* 5(2): 171-180.