DEVELOPMENT OF AN INTEGRATION MODEL FOR THE TRANSPORT OPERATORS IN THE NELSON MANDELA BAY AREA

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DECLARATION

I, Jacques Ludolph Pienaar, hereby declare that:

- The work in this research paper is my own original work;
- All sources used or referred to have been documented and recognised; and
- This research paper has not been previously submitted in full or partial fulfilment of the requirements for an equivalent or higher qualification at any other recognised educational institution.

JACQUES LUDOLPH PIENAAR

DATE

ABSTRACT

This research paper focuses on developing a model for the integration of the transport operators in the Nelson Mandela Bay area. The motivation for this integration is the Nelson Mandela Bay Municipality's Public Transport Plan, which has set the goal of developing a new public transport system for the Metropolitan area. This system will integrate the different modes of transport into a single, seamless and scheduled service which will adhere to contractually enforced levels of quality, reliability and safety. In order to achieve this vision, the current bus and taxi operators will need to be unified into a viable and operational entity structure which will provide the required services to the public. The main research problem has therefore been identified as follows:

How can the bus and taxi operators in Nelson Mandela Bay be integrated into a single entity, or small number of entities, in order to provide a viable, efficient and sustainable public transport service?

This research paper sought to address this problem by conducting a case study of the Nelson Mandela Bay project, which took place over the course of a one year period. The author served as the project manager on the team that was responsible for developing the integration model. Additional research included a study visit to the cities of Bogota and Pereira in Colombia, which have implemented similar transport models, as well as a secondary study focusing on generic organisational integration strategies in existing literature.

This paper is fundamentally a qualitative study. In this light, the research data was analysed according to the quasi-judicial method, which was deemed most suitable to the case study format adopted. The findings of the analysis were evaluated, and based on the resultant conclusions, a final integration model was recommended. The fact that this study is based on an actual project that has real world implications and consequences makes the result very relevant, and as such it will serve as a valuable addition to the body of knowledge which can be of assistance to other cities or project teams facing similar challenges in South Africa or even internationally.

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• Our Lord Jesus Christ, who provided me with the talents without which none of this would have been possible. No matter how daunting the challenges in front of me, I have always been comforted by the knowledge that all things are possible for him whose strength comes from the Lord.

QUOTATIONS

"Any business arrangement that is not profitable to the other person will in the end prove unprofitable for you. The bargain that yields mutual satisfaction is the only one that is apt to be repeated."

B. C. Forbes

"My father said:" "You must never try to make all the money that's in a deal. Let the other fellow make some money too, because if you have a reputation for always making all the money, you won't have many deals.""

J. Paul Getty

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things."

> Niccolo Machiavelli The Prince (1532)

"Change is hard because people overestimate the value of what they have—and underestimate the value of what they may gain by giving that up."

> James Belasco and Ralph Stayer Flight of the Buffalo (1994)

THE DEVELOPMENT OF AN INTEGRATION MODEL FOR THE TRANSPORT OPERATORS IN NELSON MANDELA BAY

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INTRODUCTION, PROBLEM STATEMENT AND DEFINITION OF CONCEPTS

1.1 INTRODUCTION

This research study relates to the achievement of mutually beneficial solutions in the integration of competing parties within an environment of change and uncertainty. The setting within which this problem is addressed is the transport industry in the Nelson Mandela Bay Municipality. However, the process followed in order to arrive at a solution is largely applicable to similar scenarios in other industries and other geographic areas.

According to the National Land Transport Transition Act 22 of 2000 (chapter 2, section 4), a clear vision for public transport in South Africa is set forth. Among the key stipulations in the vision, are the following:

- Public transport services must be affordable to the public and responsive to customer needs;
- They must be designed to integrate different modes of transport, to be cost efficient, to achieve service quality, to use available resources optimally, to use the most cost-effective modes (bearing in mind customer needs), to have value for the customer, to be safe and to do the least possible harm to the environment;
- Subsidies must be aimed to assist marginalised users and those with poor access to social and economic activity;
- Public transport must be given higher priority than private transport, and all spheres of government must promote public transport; and
- The participation of all interested parties in transport planning must be promoted.

In line with the requirements of the Act, the Nelson Mandela Bay Municipality has embarked on an ambitious programme to transform, formalise and integrate the outdated and inadequate public transport system in the Metropolitan area. This programme is detailed in their Public Transport Plan (PTP), which forms the basis of the contextual overview of transport provided in chapter 2 of this paper (NMBM PTP, 2006).

After extensive research and deliberation, the city decided to base its public transport system on established models previously implemented in countries at a corresponding developmental level and with a similar socio-economic profile to South Africa. Several countries in South America fall into this category, including Brazil, Ecuador and Mexico. The cities of Bogota and Pereira in Colombia were selected as examples on which the Nelson Mandela Bay transport system could be based. As a result, a study team from the city visited Colombia in October 2007, and gathered valuable data about the challenges faced and solutions developed during the implementation process of the transport systems in the cities of Bogota and Pereira. The author participated in this study visit as an independent consultant on the project.

The key requirement imposed by the city's public transport plan (NMBM PTP, 2006) is that the current operators in the local transport industry be integrated into a single, seamless transport service. For this purpose, the city requires the creation of a legal entity or small number of entities which can incorporate the current transport operators and can be contractually bound to provide a public transport service to the citizens of the area. This has the dual purpose of formalising and uplifting the currently unsubsidised taxi industry and improving the quality of the transport service currently provided to commuters (NMBM PTP, 2006).

1.2 PROBLEM STATEMENT

Given the requirements generated by the municipality's Public Transport Plan, the main problem of this research paper will be stated as the following:

How can the bus and taxi industries in Nelson Mandela Bay be integrated into a single entity, or small number of entities, in order to provide a viable, efficient and sustainable public transport service in Nelson Mandela Bay?

1.3 SUB-PROBLEMS

A number of sub-problems will be addressed in order to develop a solution to the main problem. These are the following:

Sub-problem one:

What strategies are revealed in the relevant literature than can serve as a frame of reference for the development of an integrated public transport entity?

Sub-problem two:

What strategies have been used by other cities to assist in the creation of an integrated public transport service provider?

Sub-problem three:

What are the specific stakeholder requirements that need to be addressed by the solution selected for Nelson Mandela Bay? and

Sub-problem four:

How can the results obtained from the resolution of sub-problems one, two and three be combined into a model for integrating the bus and taxi industries in Nelson Mandela Bay?

1.4 DEFINITION OF KEY TERMS

- Operating entity A legal entity incorporating formerly independent transport operators, which is able to sign a public transport service contract with the city.
- Public Transport Contract A contract for the provision of transport services to the public.
- NMBM, Metro, Municipality Nelson Mandela Bay Municipality.
- NMBM PTP Nelson Mandela Bay Municipality Public Transport Plan.
- ECDRT Eastern Cape Department of Roads and Transport.
- ABC Algoa Bus Company.
- PEPBOA Port Elizabeth Private Bus Owners Association.

• NLTTA – National Land Transport Transition Act.

1.5 DELIMITATION OF THE RESEARCH

The development of a public transport system is an ambitious undertaking, covering a diverse field of disciplines. It is therefore important to note, that this paper will be focusing on a specific sub-problem of the broader public transport initiative only, namely the development of an entity structure that can best house the integrated operations of the formerly independent transport operators in the region.

Therefore, the study will focus on developing a corporate structure that will achieve the required integration while at the same time being capable of operating as a viable and sustainable business. While the results of other work-streams referred to in the NMBM PTP, such as those addressing route planning, bus specifications, transport scheduling and financial modeling, will be necessary inputs into the planning process, the resolution of these issues will not be within the scope of this paper. Instead, the results of any such work will be imported from external sources and utilised as inputs into the decision making process as required.

1.6 GEOGRAPHICAL DEMARCATION

This study will focus on developing a transport operating entity or entities specifically for Nelson Mandela Bay, the geographical area of which is defined in the NBMB PTP, as indicated in chapter 2 of this paper.

1.7 ASSUMPTIONS

No specific assumptions have been made.

1.8 RESEARCH METHODOLOGY

This research paper is based on a case study of the integration of the transport service providers in Nelson Mandela Bay according to the Public Transport Plan (PTP) of the Nelson Mandela Bay Municipality. In conducting the research project, the following research methodology was followed.

1.8.1 Literature study

A literature study was conducted on generic integration strategies utilised to facilitate integration between organisations. Specifically, the two types of integration strategies that were examined are merger strategies on the one hand, and joint venture strategies on the other.

Epstein (2004:3) defines a merger as the creation of a new organisation out of two or more organisations of more or less equal stature by pooling all resources. Das et al., (2003:1) describe a joint venture as a form of inter-organisational co-operation where a new corporate entity is created and the partners share in the equity structure of the new entity in some agreed proportion. However, a joint venture need not necessarily require the creation of a new entity. In some cases, a purely contractual agreement partnership is sufficient for the purpose of creating a joint venture. According to Young and Bradford (1977:11) a joint venture can be defined as,

"An enterprise, corporation or partnership formed by two or more companies, individuals or organisations at least one of which is an operating entity which wishes to broaden its activities for the purpose of conducting a new profit-motivated business of permanent duration. In general the ownership is shared by the participants with more or less equal distribution and without absolute dominance by one party."

The aim of the literature study was to identify the advantages and disadvantages of each type of strategy, the major challenges that need to be overcome, and the methods required

to successfully create integrated organisations by utilising each strategy respectively. Based on the results, conclusions were drawn to establish the most suitable approach for the integration project in question.

1.8.2 Empirical study

The empirical study consisted of a case study of the integration project in Nelson Mandela Bay. Collis and Hussey (2003:344) define a case study as: "A methodology which focuses on understanding the dynamics present within a single setting; often used in exploratory research."

Data was gathered through the use of the following methods:

- Review of strategies followed by other cities visited as part of an international comparative exercise;
- Review and analysis of relevant documentation;
- Interviews with the key stakeholders in the process;
- A focus group exercise to evaluate the stakeholders' response to the conceptual integration model; and
- Direct observation of the integration process, from the planning stage, through to the negotiation and entity creation stages.

Based on the data gathered, conclusions were drawn and recommendations produced. Areas for further research were also identified.

1.9 STRUCTURE OF STUDY

The study is presented within a methodical structure, divided into sections which progress in a logical sequence. Each of the chapters addressed a specific sub-problem in the order in which they were listed and conclusions and recommendations were drawn from the data gathered. A chapter outline is provided below, linking chapters to sub-problems.

In chapter 1 an overview of the research study is presented.

In chapter 2, a contextual overview of transport in Nelson Mandela Bay is provided. The overview presents the history of public transport in Nelson Mandela Bay, the current environment, the Municipality's vision for the future and the proposed strategies to achieve this vision. Out of this chapter flows the reasoning and justification for the research problem, and the conclusion of this chapter paves the way for the literature study, which is presented in chapter 3.

In chapter 3, a literature study is conducted where two prominent integration strategies are analysed. The characteristics, benefits, challenges and selection criteria of a merger strategy and a joint venture strategy are discussed, and conclusions drawn on the suitability of each for the situation at hand.

In chapter 4, the results of the study trip to Colombia are presented. Based on this, conclusions were drawn from the lessons learned from the transport initiatives undertaken in the cities of Bogota and Pereira. These conclusions were applied to the situation in Nelson Mandela Bay, and applicable recommendations for a local transport solution are presented.

In chapter 5, the research methodology that was used in the research study is discussed.

In chapter 6, the results of the empirical study are presented and discussed. This involved interviews with the key stakeholders in the local transport industry. The stakeholder consultation process consisted of empirical research in that the specific needs of the stakeholders in the Nelson Mandela Bay transport industry were clearly articulated and used as a primary input into the development of the proposed integration model. The results of this chapter ensure that the solution that is developed is tailor-made for the unique challenges faced in Nelson Mandela Bay.

In chapter 7, the results of the preceding chapters are amalgamated and utilised to develop an integration model uniquely suited to the main problem of this research paper.

Finally, in chapter 8, the conclusions based on the entire process are presented, and possible avenues for future research suggested.

As per this structure, the study follows a systematic approach by which the background to the research problem is thoroughly examined, the data gathering process clearly discussed, the process of developing a solution carefully documented, and conclusions drawn from the results.

1.10 SIGNIFICANCE OF THE RESEARCH

According to the National Land Transport Transition Act (NLTTA) 22 of 2000, the integration and improvement of public transport is a priority of the National Department of Transport in South Africa. At the time of this study, a number of the major cities in the country were in the planning stages of similar initiatives. However, at the time of writing this paper, no evidence could be discovered to confirm that the integration of the bus and taxi industries into inclusive operating entities has been fully achieved in any South African city. The project that is the primary focus of this case study will therefore be among the first, if not *the* first to achieve this in the country. If successful, the information gathered from this exercise could be of significant value to other regions facing similar challenges.

Furthermore, it will add to the international body of knowledge which is continually expanding as more cities around the globe – particularly in developing countries - seek to address the challenges of integrating and formalising historically inefficient public transport systems. In his presentation to the visiting NMBM fact-finding team in October 2007, Edgar Sandoval, General Manager of the Transmilenio Bus Rapid Transit system in Bogota, Colombia, stated that the growing challenges of exploding urban populations, traffic congestion and air pollution emphasise the need for increased efficiency in the provision of public transport to urban communities. The thought that lessons learned in Nelson Mandela Bay could ease the transition of other cities towards integrated transport

systems is an inspiring one, and adds great significance to the conclusions that will be drawn from this research study.

1.11 CONCLUSION

The aim of this chapter was to place the study into perspective by stating the main problem of the research along with the sub-problems. The following chapters aim at addressing the main and sub-problems in logical and sequential order. To lay the groundwork for this process, chapter 2 will provide a contextual overview of public transport in Nelson Mandela Bay.

CONTEXTUAL OVERVIEW OF PUBLIC TRANSPORT IN NELSON MANDELA BAY

2.1 INTRODUCTION

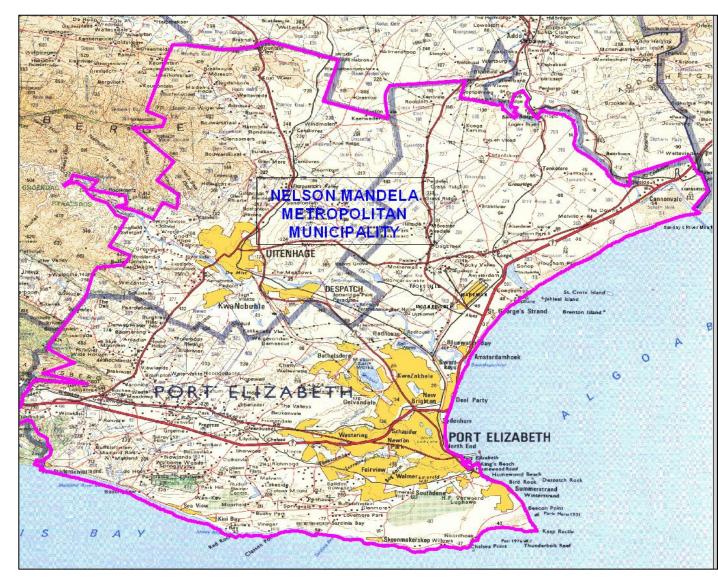
To devise a strategy to achieve the integration of the taxi and bus industries in Nelson Mandela Bay, it is necessary to review the history and context of the transport industry in the region. Only by understanding the historical context of the current operators can an accurate picture of the needs and requirements of relevant stakeholders be developed. This will ensure that the strategic goals of the transport initiative are adapted to the unique environment and challenges that exist in Nelson Mandela Bay.

In this chapter, key facts and figures from the Nelson Mandela Bay Municipality's Public Transport Plan, hereafter referred to as the "NMBM PTP", or just, the "PTP" are presented to provide a summarised overview of transport in the region.

2.2 HISTORY AND GEOGRAPHY

The Nelson Mandela Bay Municipality (NMBM) was established in 2000 when the local authorities of Port Elizabeth, Uitenhage, Despatch and several smaller adjacent local authorities were combined into one metropolitan municipality with a new demarcated boundary. A map of the municipal area, with the main transport routes indicated, is shown in Figure 2.1 The size of the metropolitan area is about 1 950 km² and the population was recorded as 1 003 790 in the national 2001 census (NMBM PTP, 2006:1).

FIGURE 2.1 NELSON MANDELA BAY METROPOLITAN AREA



(Source: NMBM PTP, 2006)

Buses and minibus taxis are the main public transport service providers in the NMBM area. There is a commuter rail service between Port Elizabeth and Uitenhage, however its use is limited to a relatively small number of residents who live within walking distance of the stations (NMBM PTP, 2006:9).

In Table 2.1 below, the levels of usage of the different modes of transport is indicated. As can be seen, the use of minibus taxis has increased from 1996-2001, while the use of buses has remained constant and rail commuter numbers have declined.

Mode	1996	%	2001	%	Change	%
Taxi	105 480	59	118 746	62	+13 266	+13
Bus	62 620	35	64 485	34	+ 1 865	+3
Train	9 930	6	7 392	4	-2 538	-26
Total	178 030	100	190 623	100	+ 12 593	+7

TABLE 2.1 PUBLIC TRANSPORT MODE USAGE (PASSENGERS PER DAY BOARDING VEHICLES)

(Source: NMBM PTP, 2006)

Travel demand in the future

The future travel demand based on a revised population distribution for 2020 is shown in Table 2.2.

Mode	2004	2020	Growth (% p.a.)
Non motorised	460 000	650 000	2,2
Public transport	400 000	700 000	3,4
Private transport	550 000	800 000	2,0
Total	1 410 000	2 150 000	2,6

 TABLE 2.2
 FUTURE
 TRAVEL DEMAND (PERSON TRIPS PER DAY)

(Source: NMBM PTP, 2006)

The projected increase in total trips is approximately the same as the projected population growth rate of 2,5% per annum.

2.3 TRANSPORT OPERATORS

2.3.1 Taxi industry

According to the PTP (2006:11), there are ten registered Taxi Associations (TA) based in the Nelson Mandela Bay Metropolitan area. The ten associations, and their claimed membership numbers are listed in Table 2.3 below.

		Claimed	Claimed	Verified Vehicles
		Members	Vehicles	(NATIS)
Algoa TA	ATA	279	226	211
Border Alliance TA	BATA	804	877	640
East Cape Long Distance TA	ECLDTA	81	43	41
Northern Areas Taxi Operators Ass	NATOA	83	95	74
Norwich Long Distance TA	NOLDTA	114	144	100
Uitenhage & District TA	UDTA	236	311	252
Uncedo Service TA (PE)	USTA(PE)	501	630	493
Uncedo Service TA (Uitenhage)	USTA(Uit)	564	466	437
Uitenhage TA	UTA	N/a	-	-
Western Suburbs TA	WESTA	34	54	46
Total		2 696	2 846	2 294

TABLE 2.3 TAXI ASSOCIATIONS, MEMBERSHIP AND VEHICLES IN NMBM (2001)

(Source: NMBM PTP, 2006)

According to the PTP (2006:11) it is difficult to estimate the actual size of the minibus taxi fleet as there is a poor correlation between the various vehicle data sources available. The ten associations shown in Table 2.3 claim a total membership of 2 696 operators. However, the Eastern Cape Taxi Registrar only shows a total of 1 542 registered operators for these associations. Similarly, of the 2 846 vehicles which the associations claim belong to their members, only 2 294 could be verified as existing vehicles in the National Traffic Information System (NATIS). On the other hand, the Port Elizabeth Road Transportation Board has issued a total of 1768 minibus taxi permits within the NMBMM area.

The conflicting data from the various sources is indicated in Table 2.4 below.

	Vehicles in Database	Confirmed in NATIS
LRTB Permits (LTPS)	1768	1721
Eastern Cape Taxi Registrar	1800	1675
Taxi Associations	2846	2294
Surveys	2835	2835
		2 300 - 2 600

TABLE 2.4 ESTIMATED TAXIS IN NMBM

(Source: NMBM PTP, 2006)

Taking into account the various sources shown in Table 2.4, it is estimated that there are between 2 300 to 2 600 minibus taxis operating in the NMBM, of which between 400 and 800 may be illegal operators (NMBM PTP, 2006:12).

2.3.2 Bus Industry

The Algoa Bus Company (ABC) is the only subsidized bus operator providing commuter passenger services in the Nelson Mandela Bay Metropolitan area, operating approximately 265 buses during the weekday peak periods. According to the PTP (2006:13), the results of on-board surveys conducted in 2001 indicated that the Algoa Bus Company transports approximately 65 000 passengers per day during the 1561 daily trips. A breakdown of this figure between morning and afternoon trips is provided in Table 2.5 below.

Period	Vehicle Trips	Passenger Trips
AM Period	770	33 380
PM Period	791	31 105
Total per Day	1561	64 485

TABLE 2.5 AVERAGE WEEKDAY BUS VEHICLE & PASSENGER TRIPS (2001)

(Source: NMBM PTP, 2006)

The Port Elizabeth Private Bus Owners Association consists of a small group of private bus operators who transport a relatively small number of passengers on a mostly charter basis. Estimated figures for their passenger volumes were not available at the time of the study.

2.4 OVERALL SITUATION

In order to be able to forecast future public transport demand for use in planning a longterm public transport strategy, the NMBM decided to undertake a travel survey in 2004 of a randomly selected 1% sample of the metropolitan population and obtain details of transport use by questionnaires completed during home interviews.

The travel survey indicated an estimated total of 1,4 million person trips per day in the Metropolitan area. 33% were by foot, 41% by private transport and the remaining 26% by public transport modes. Of the motorised trips, private transport makes up 60% and public transport 40%. The public transport trips (380 000 per day) are split between the modes as follows: taxis carry 75%, buses carry 23% and trains carry 2% (PTP, 2006:15). The trips per mode obtained from the travel survey are shown in Table 2.6.

Mode	Person Trips	% (All modes)	% Private/Public	% Public Modes
Walk	460 000	33	-	-
Private vehicle	572 000	41	60	-
Taxi (all types)	286 000	20		75
Bus	89 000	6	40	23
Train	5 000	0,4		2
Total	1 412 000	100	100	100

TABLE 2.6PERSON TRIPS PER DAY (2004 TRAVEL SURVEY)

(Source: NMBM PTP, 2006)

The number of persons using taxis as reported in the travel survey is almost double the number of persons counted boarding taxis at ranks. This gives an indication of the number of illegal taxis operating within the system.

Trip Cost

According to the PTP (2006:17), the travel survey showed that, on average, a public transport trip (one-way) costs approximately R4,00. A breakdown of the travel costs across different modes of transport is provided in the table below.

Mode	Average Trip Cost	Average Trip Length	Average Cost/km
Jikileza taxi	R3,50	8 km	44c
Minibus taxi	R4,03	12 km	34c
Bus	R4,20	22 km	19c
Train	R4,98	30 km	17c

TABLE 2.7 AVERAGE TRIP COST PER MODE (2004 TRAVEL SURVEY)

(Source: NMBM PTP, 2006)

2.5 VISION FOR THE FUTURE

The mission for the NMBM Public Transport Plan is based on the vision contained in the NMBM Integrated Development Plan, stated as follows:

"To provide an efficient, safe, affordable, sustainable and accessible multi-modal public transport system which supports social and economic development to ensure optimal mobility and improved quality of life for the residents and users of the transport system in the metropolitan area" (NMBM PTP, 2006:5).

To fulfill this vision for public transport in the region, the decision was taken that the public transport system must be integrated, with the integration of time-tables/schedules and facilities making it easy to change between modes of transport as well as between routes operated by different operators. Part of the integration of the system involves integrated fares to make the cost of traveling independent of the number of transfers. It is the NMBM's intention that road-based public transport services will be operated by way of a formal contract with transport operators who will supply services that are planned and regulated by the NMBM (NMBM PTP, 2006:7).

2.6 STRATEGY TO ACHIEVE THE VISION

While the detailed operational design of the envisaged system are beyond the scope of this paper, a brief overview is nevertheless necessary in order to understand the context of the roles that the bus and taxi industry are respectively required to fulfil in the new transport service. Furthermore, it is an inescapable fact that the operational requirements of the new service will have a significant impact on the suitability of the various integration models that are considered, and on the negotiating process required to arrive at a final recommended structure.

From an operational perspective, the public transport plan of the Municipality is based on a trunk and feeder route system. This essentially means that the city will be divided into a number of geographical areas (five in total) which will be connected via a number of main (trunk) routes. Passengers will be transported along these trunk routes by buses. In each area, one or more modal interchanges (bus stations) will be located. Within each geographical area, a large number of smaller, or feeder routes will transfer passengers from virtually any point in the city to the closest modal interchange (bus station). These feeder routes will be serviced by minibuses similar to those operated by the current taxi industry. (NMBM PTP, 2006:33).

The difference between the current and the new system is that these feeder services will only operate within the confines of a specific geographical area, and will only be used to carry passengers along feeder routes to and from the centrally located modal interchanges. At the stations, commuters will then be able to transfer onto a trunk bus, which will transport them along the main routes to more distant parts of the city (NMBM PTP, 2006: 34).

2.6.1 Proposed trunk bus network

The proposed trunk bus network will form the public transport corridors and is shown in Figure 2.2.

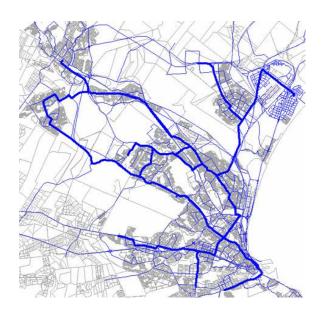


FIGURE 2.2 PROPOSED TRUNK ROUTE NETWORK

(Source: NMBM PTP, 2006)

The major corridors will be the Khulani Corridor from Motherwell to the CBD, Standford Road corridor and Cape Road corridor as depicted in Figure 2.2 above.

2.6.2 Proposed feeder and local network

According to the NMBM PTP (2006:34), the network for local and feeder public transport services operated by buses or minibus taxis will cover the whole metropolitan area as shown in Figure 2.3. The links between the feeder and local system to the trunk bus system will be concentrated at the interchanges as shown in Figure 2.4. For part of the network operation the use of minibus taxis will be important and the major taxi ranks are shown in Figures 2.3 and 2.4.

FIG 2.3 LOCAL & FEEDER ROUTE NETWORK AND RANKS

FIG 2.4 MAJOR TAXI ROUTES



(Source: NMBM PTP, 2006)

(Source: NMBM PTP, 2006)

2.6.3 Organisational requirements

The proposed strategy for the NMBM public transport system entails significant organisational changes to the local transport industry.

Negotiated contracts for route operations

The routes to be operated under new contracts are to be decided by a negotiation process to allow minibus-taxi and bus-operators currently operating to form joint operating entities and be part of a new contract. The transformation will include both the Algoa Bus Company and the minibus-taxi operators. The strategy will be to support current minibus-taxi operators and the Algoa Bus Company to form new mutually-owned entities that can form the basis of a contract for corridors with defined routes. Only if these negotiations do not result in acceptable contracts, will an open tender process be used (NMBM PTP, 2006:39).

The replacement of services currently provided by minibus-taxis on the various routes by new contract bus services will require the removal of competing taxi operations. This will be necessary so that the modes do not compete for business. Competition would have the effect of reducing the passenger market from each competing mode, and causing conflict between the operators.

According to the NMBM PTP (2006:40), the following key conditions will be imposed by the system:

- Minibus-taxi operations and current bus-operations will cease on commencement of the contract by the new entity;
- The current minibus-taxi operators would either take up shares and form part of the entity, cease operations permanently or agree to operate on a corridor elsewhere by agreement with the NMBM;
- Contract rates will be based on similar and acceptable market rates for bus contracts; and
- The negotiated contract will be valid for 5 7 years, after which the contract could be renewed either by extension of the negotiated contract or by tender, according to the decision of NMBM and ECDRT.

According to the NMBM PTP (2006, 39), the strategy is aimed at developing a framework within which the existing bus and minibus-taxi operations can be converted into a formalised, tender-based service. While the concept has been explored in South African cities to a very limited extent, the size and scope of this strategy will break new ground from a local perspective. However, similar systems have been implemented in many countries where it has been necessary to move from an unregulated public transport system to a more planned and regulated one. Recent examples can be found in Curitiba, Brazil and Bogota, Colombia and also some of the more developed countries.

Transformation of the taxi associations

The current system of associations established in the National Land Transportation Transition Act formalised the taxi industry into ten registered taxi associations in NMBM. These associations provide structure in the industry and play a valuable role by organising the industry in such a way that it responds to the passenger demand and changing market conditions (NMBM PTP, 2006:42).

The transformation of the public transport network and services as envisaged in terms of this plan will reduce the role of associations over the long-term as minibus-taxi type services are transformed into contracted scheduled services. This will provide the opportunity for many taxi operators to cease being members of informal taxi associations. Instead, they will become shareholders in a new, professional bus operation within a formal company structure (NMBM PTP, 2006:43).

2.7 FINDINGS BASED ON PUBLIC TRANSPORT PLAN OVERVIEW

It is evident from the above that the PTP proposes fundamental changes to the transport system in Nelson Mandela Bay. This poses a number of significant challenges to the city. Historically, the individual transport operators have competed for a market share of the commuters in the Metropolitan area. This competition has led to the development of deeprooted rivalry and mutual distrust within the industry, which significantly complicates the challenge of integrating the operators into a single service.

The challenge is further exacerbated by the widely contrasting structures and operating styles of the bus and taxi industries. The Algoa Bus Company (the major player in the local bus industry), is an established corporate entity, with a mature organisational structure and experienced management team. The company has decades of experience in operating a scheduled bus service and due to the existing interim contract with the Department of Transport a transfer to a new contract-based service will not present major disruption to their operations.

The taxi industry, in contrast, can best be described as a large group of sole proprietorships. Each taxi operator effectively runs his own business on a cash basis. Although all operators belong to associations, ultimately they are each responsible for their own financial survival. Where the bus company is a single entity, the independence of the taxi operators means that the taxi industry consists of approximately 2500 small businesses. Therefore, achieving a successful integration between the informal taxi industry, and the formal bus industry is not a task that can be approached lightly.

If the problem is contemplated from a purely business perspective, it would make sense to invite an open tender, and allow interested companies to submit proposals to provide the services as stipulated by the contract. Indeed, this is the route that was followed in the examples of Bogota and Pereira in Colombia. Tenders were invited, and the best proposal won the bid for the contract. In South Africa this is also an option, however, since a driving force behind the proposed project is the uplifting and formalisation of the taxi industry, it was decided by the city to seek permission for the issuing of a negotiated contract, whereby the current operators in the city can be integrated and jointly included in the contract.

While this could be considered a noble ideal, it imposes significant constraints on the negotiating process and on the likelihood of arriving at the most efficient solution to the transport challenges faced by the city. Essentially, the business criteria need to be balanced with the political requirements that must be adhered to in order to arrive at a recommended structure for the new integrated system.

Another fundamental change is that this system will require strict adherence to finely calculated schedules. All buses on the feeder and trunk routes will be providing a scheduled service and will be subject to centrally planned timetables in order to ensure an integrated, seamless and efficient transport service for the public. While this is nothing new to the bus industry, it will be a significant change for the taxi industry, which currently operates on the principle that each operator is responsible and therefore in control of his own vehicle and its operations.

On the face of it, this seems to provide a clear delineation between the services required from the taxi and the bus industries respectively. Therefore, it would appear as if the integration problem can be solved by simply allocating the taxi industry to the feeder routes and the bus industry to trunk routes in the new system.

However, as mentioned earlier, a key requirement of the Department of Transport is the formalisation and empowerment of the taxi industry, and in this regard the taxi industry has indicated quite emphatically (see stakeholder consultation in chapter 6) that it is not interested in being limited to providing a feeder service in the new system. In fact, taxi operators wish to be given the opportunity to become bus operators as well. This is influenced in part by the fact that the bus services are expected to earn a significantly larger potion of the revenues in the new system, as well as the fact that as a transport service matures, the service gradually migrates towards placing a greater and greater reliance on bus services at the cost of minibus operations.

With this in mind, the challenge of the city is to integrate the former bus and taxi industries into a legal entity or entities that can successfully represent the interests of all relevant stakeholders in a way that empowers the taxi industry while at the same time retaining the experience, established infrastructure and management expertise resident in the bus industry. Ultimately, the entity or entities should be capable of operating as a successful business to the extent that it will be able to fulfil all the requirements of the Municipality's public transport contract. This means that the entity should be capable of providing a scheduled transport service to the public that is efficient, reliable and sustainable.

This solution needs to address and satisfy requirements from both the political and business spheres. Political, because the stipulations of government need to be adhered to if the project is to succeed. And business, because ultimately the business model will be crucial if the new entity is to fulfil the service obligations to the public as stipulated in the transport contract with the city.

Satisfying these seemingly contrasting requirements is a daunting challenge, and requires creative thinking and innovative solutions. In order to achieve this, it is necessary to break the problem down to its simplest principles. By doing so, it can be stated that this is

fundamentally a problem of integrating a number of different organisations or parties in order to fulfil specific business requirements. So the focus therefore needs to be on finding a suitable integration strategy that can be considered in order to achieve the stated goals of the project. With this in mind, it is the logical next step to study existing literature that addresses this topic.

Thus, with the background and context clearly sketched, the sub-problems of this paper can be defined as follows:

- What strategies are revealed in the relevant literature than can serve as a frame of reference for the development of an integrated public transport entity?
- What strategies have been used by other cities to assist in the creation of an integrated public transport service provider?
- What are the specific stakeholder requirements that need to be addressed by the solution selected for Nelson Mandela Bay? and
- What solution can be developed based on the above?

2.8 CONCLUSION

This chapter has provided the context within which the research study will take place, and examined the justification for the development of the main research problem and its related sub-problems. In the following chapters, each of these sub-problems will be individually discussed, starting with the literature study in chapter 3.

CHAPTER 3

STRATEGIES THAT CAN BE UTILISED IN THE DEVELOPMENT OF AN INTEGRATED PUBLIC TRANSPORT ENTITY STRUCTURE

3.1 INTRODUCTION

The fulfillment of the goals of this case study requires the integration of multiple corporate entities in order to meet the requirements of a specific contractual agreement. Therefore, in order for a proposed solution to be formulated, it is necessary to examine the existing literature to gain insight into the strategies commonly utilised to achieve integration between multiple parties to achieve a common goal. The strategies that will be considered can be divided into two types.

The first type is a full merger, where the previous identities of the partnering entities are fully eliminated and a single new legal entity is created to replace them.

The second type of integration is a corporate alliance or joint venture, where the individual identities of the partnering organisations are retained. In this case, co-operation between the partners is formalised on either a contractual basis or through the creation of a new, jointly-owned entity that will replace some of the functions previously fulfilled by one or more of the partnering entities.

In the next section, the characteristics of these two strategies will be examined further in detail. It should be noted that the approach to the literature study will be to examine each integration strategy from the perspective of it's suitability for the integration of the bus and taxi industries in Nelson Mandela Bay. Therefore, the specific characteristics of each strategy will be discussed in light of the implications it would have for the case study scenario. In this light, the key challenges, drivers of success, advantages and disadvantages of the two approaches will be discussed, and applied to the case at hand.

3.2 MERGER STRATEGY

A merger creates a new organisation out of two or more organisations of more or less equal stature by pooling all resources (Epstein 2004:3).

According to Brouthers et al, (1998:348), mergers take place for three main reasons:

- Mergers can be considered in order to improve the economic performance of the firm. This could include goals such as achieving economies of scale, spreading risk, reducing costs or responding to market failures;
- Mergers sometimes take place because the managers of the organisations involved see a personal benefit in the process. Such benefits could include increased prestige or increased remuneration for the leadership of the firm; and
- Mergers might be embarked upon for strategic reasons, such as achieving synergy, global expansion, market power, obtaining desired resources or the acquisition of a competitor.

According to Brouthers et al, (1998:349) a survey of Dutch merger activities listed 17 common motives for mergers in the following order of importance.

TABLE 3.1 MERGER MOTIVES

Rank	Motive
1	Pursue market power
2	Increase profitability
3	Marketing economies of scale
4	Create shareholder value
5	Increase sales
6	Technical economies of scale
7	Cost reduction
8	Create entry barrier
9	Acquire competitors
10	Defense mechanism
11	Risk spreading
12	Managerial challenge
13	Acquire raw materials
14	Replace inefficient management
15	Enhance managerial prestige
16	Differential value of target
17 (Source: Broutha	Market failure

(Source: Brouthers et al, 1998)

In the Nelson Mandela Bay case study, the reason for the proposed integration does not fit directly into any of these categories. Instead, the integration is sought in response to a governmental requirement enforced upon the organisations in question.

3.2.1 Challenges of a Merger strategy

Irrespective of the reason behind them, mergers can be risky ventures. Gendron (2004:1), states that when judged from a financial performance perspective, 60%-70% of mergers are ultimately unsuccessful. A table of failed mergers is provided below.

Company	Goal	Results
Union Pacific and Southern Pacific	Creation of seamless rail network from the Midwest to the West coast	Goals not achieved
HFS and CUC International	Creation of Cendant to build market powerhouse	Goals not achieved
Conseco and Green Tree Financial	Increased profits	Goals not achieved
Daimler-Benz and Chrysler	Acquisition of competitor for market expansion	Goals not achieved
Aetna and Prudential	Market expansion	Goals not achieved
AlliedSignal and Honeywell	Combining the technical skills of two companies for increased competitiveness	Goals not achieved
AT&T/TCI/Mediaone	Market expansion	Goals not achieved
Federated Department stores and Fingerhut	Acquisition of core competencies of competitor	Goals not achieved
Mattel and Learning Co.	Market expansion	Goals not achieved
McKesson and HBO	Market expansion	Goals not achieved

TABLE 3.2	MAJOR MERGER FAILURES
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⁽Source: Gendron, 2004:2)

There are a number of reasons for the high merger failure-rate. Chief among these is the issue of incompatibility between organisational cultures. Most integration projects require the blending of different cultures, policies and organisations into a single functional unit in a compressed timeframe. This is inherently risky, and very difficult to achieve successfully.

This is a particularly relevant issue, given the significant organisational differences that exist between the two parties in the Nelson Mandela Bay transport integration initiative. A thorough understanding of the impact of cultural incompatibility is therefore required if the outcome of this integration is to be successful.

Epstein (2004:2) writes that culture clashes, confusion among staff and internal disruptions are common when two companies are integrated. This often leads to dramatic declines in employee and customer satisfaction and ultimately to significant declines in profitability. According to Epstein, one study showed that shareholder value was destroyed in 61% of recent mergers.

Cartwright and Cooper (1992:5) support this viewpoint, by stating that the type of culture of the combining organisations, the resultant cultural dynamics and the extent and speed with which a unitary and coherent culture emerges, will play critical roles in determining the outcome of any inter-organisational combination.

According to Cartwright and Cooper (1992:5), the role of human factors in merger success or failure is paramount. The two most important factors influencing the success of organisational integration are the cultural compatibility of the organisations and the manner in which the integration process is managed. A study conducted by the British Institute of Management, in 1986, found that the underestimation of cultural compatibility issues was a major contributor to merger failure.

The integration of two organisations invariably results in a level of culture shock for the individuals within the two organisations. This shock is enhanced when the individuals involved had not chosen to make contact in the first place (Cartwright and Cooper, 1992:78). Worryingly, this is a rather accurate depiction of the situation in the bus and taxi industries at the time of integration. Neither has chosen to be involved in a merger, yet they

are for all intents and purposes forced into the process by the requirements of the NMBM's new transport contract.

The clash of cultures can lead to significant disruption and unhappiness among employees. This generates the potential for high levels of staff turnover during and after the integration process. According to Gendron (2004:85), up to 47% of top managers from acquired companies leave within three years after the merger. Furthermore, staff turnover is not limited to top management. Research conducted by Cartwright and Cooper (1992:43) indicates that unplanned personnel losses and absenteeism occur at all levels right down to shop-floor and blue collar workers.

It is evident, therefore, that merger strategies are extremely difficult to implement and are generally accompanied by a high level of risk and uncertainty. In the case of the Nelson Mandela Bay transport industry integration, these challenges are exacerbated by the existence of significant cultural and organisational differences between the bus and taxi operators. This does not build confidence in the success of a potential merger strategy between the two industries.

Nevertheless, mergers remain one of the primary methods of integrating the operations of multiple organisations into a unified operational structure. Therefore, should a merger strategy prove suitable for the integration of the bus and taxi industries in Nelson Mandela Bay, it is important that the risk of failure is limited to the minimum level possible. In order to achieve this, it is necessary to examine the drivers of success during a merger process.

3.2.2 Drivers of merger success

Epstein (2004:4) states that a strong post-merger integration process can overcome miscalculations in the merger design while conversely a weak post-merger integration strategy can destroy even a well-planned, considered merger. In many cases of merger failure, companies have either developed an inadequate post-merger integration strategy, or, where the strategy was sufficiently developed, have struggled to implement it effectively. Additionally, many companies wait too long to begin the post-merger

integration process. By delaying the post-merger integration strategy, a company undermines its prospects of merger success from the start.

So how can a post-merger integration strategy be successfully developed and implemented to increase the chances of merger success? Epstein identifies 5 key drivers of successful post-merger integration.

Coherent integration strategy

According to Epstein (2004:5), the integration strategy of the new organisation should be well articulated in order to emphasise that this is a "merger of equals." The emphasis on the equality of the two partners is important, as it will have significant implications for all stakeholders involved. A feasible time to start implementing the integration strategy is when the organisational structure of the new organisation is discussed and decided upon.

To quote Epstein (2004:5):

"It is preferable that companies begin with an open mind when designing the structure and not be constrained by the structure of either previous company."

This open egalitarian approach should continue throughout the post-merger integration in the selection of systems, processes and practices. Instead of basing decisions on the status quo of one parent organisation or the other, all decisions should be made on a neutral basis through an objective decision-making process.

Strong integration team

According to Epstein (2004:7), the structure, leadership and composition of the integration team is of vital importance to successful integration. In Epstein's view, the team must serve in a full-time capacity with sufficient resources and authority to carry out its mandate. A project management approach should be followed whereby the integration project team is

separated from the core business of the company. In other words, the integration project should be a dedicated resource focused exclusively on achieving a successful post-merger integration. The team members should be recruited from both the companies involved.

This view is corroborated by Cartwright and Cooper (1992:110) who advocate the establishment of joint groups consisting of employees from both organisations to assist in the cultural integration of the merger partners. These groups should operate in a non-threatening and collaborative manner, to address any problems that may stem from the merger process.

A crucial aspect of the team is its leadership. It is important for the leader to be of sufficient seniority and strength of character to guide the team through the difficult integration process. Epstein (2004:7) suggests a senior executive from one of the merging companies as a suitable candidate. However, Cartwright and Cooper (1992:110) note that an excessive focus on a top-down approach may result in a heavy reliance on the "trickle-down effect" to reach grassroots level. This carries the risk of slowing down the cultural change.

Nevertheless, Epstein (2004:7) bolsters his argument by referring to the AOL Time Warner example, where the lack of strong integration leadership was held up as a key reason for the lack of effective communication between the two executives during the integration process.

The challenge of a clash of corporate cultures during a merger has already been discussed above. It is the responsibility of the integration team – and its leadership - to lessen the impact of the culture clash in the new organisation. Failure to manage the integration of the company cultures efficiently can have severe consequences.

In the Daimler Chrysler merger, clashes in corporate culture between the two firms led to financial losses and the dismissal of many key Chrysler employees. Strong leadership and an effective post-integration management process could have significantly reduced the severity of the clash of cultures and its unwanted consequences.

Communication

Cartwright and Cooper (1992:104) state that the need for communication during a merger project cannot be over-emphasised. In the absence of clear and regular communication, uncertainty and rumours can lead employees to fear the worst. Therefore, even if there is no new information available, it is preferable to reaffirm this fact through active communication rather than allowing suspicions to grow as a result of a lack of communication.

Similarly, Epstein (2004:9), states that poor communication leads to the spread of misinformation, uncertainty and exaggerated fears among employees and other stakeholders. Communication from senior management must therefore be "significant, constant and consistent" throughout the integration process. He defines the role of communication as follows:

"It must build confidence in the merger and the integration process, reinforce the purpose of the merger with a tangible set of goals, and provide decisive responses to a variety of stakeholder concerns" (Epstein, 2003:9).

Speed in Implementation

According to Epstein (2004:10) companies that move too slowly in the integration process are exposed to significant threats. Employees may regard the slow progress as a sign of uncertainty and hesitation. This may drive them to seek more stable employment elsewhere. Customers could also fear instability and be driven to the products or services of rival firms.

Ultimately, a lack of speedy progress creates the appearance of doubt and a lack of confidence, which can undermine the entire merger process.

Aligned measurements

The success of a merger needs to be evaluated according to clearly defined indicators and appropriate measures of success (Epstein 2004:11). For a successful post-merger integration these measures need to be well-aligned with the merger strategy and vision. Milestones and targets must be created in all areas to enable effective monitoring of progress. The responsibility of creating these matrices should be allocated to the integration team in co-operation with business and functional units.

The well known JP Morgan-Chase Merger is a case study that provides a useful model for the study of merger processes.

The key to post-merger integration at JP Morgan-Chase is defined in the JPMC Hexagon, depicted below (Epstein 2004:12).

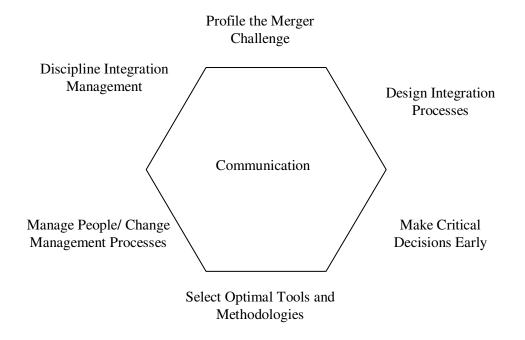


FIGURE 3.1 POST MERGER INTEGRATION HEXAGON

(Source: Epstein, 2004)

Fundamentally, this model recognises open communication as the foundation of successful post-merger integration. In fact, at JPMC senior management went so far as to emphasise

the philosophy of "over communication" during the integration (Epstein 2004:17). Communication throughout the merger was co-ordinated across all constituencies to achieve a consistent message. Channels of communication included letters, phone calls, email, presentations and town hall meetings. Through it all, the purpose and strategy of the merger, the status of merger events and the impact of the merger on clients and employees were communicated as clearly as possible to relevant stakeholders.

For the Nelson Mandela Bay transport integration project, communication is an equally vital aspect of the integration process. The historical presence of mistrust and antagonism between the participants provides fertile ground for the spread of misinformation and rumours. The need to keep stakeholders informed, and to prevent the spread of misinformation should be a high priority of the project team.

Based on the above, it is evident that proper planning and a well-managed integration process are essential to merger success. Similarly, Gendron (2004:1) states that strong leadership and teamwork among the personnel of both organisations involved in the merger are critical if the established goals are to be met. Therefore, good planning and excellent communication are required to achieve satisfactory merger results.

3.2.3 Suitability of a Merger strategy

The sources quoted during the examination of merger strategy emphasised the severity of the challenges that stand in the way of successful merger implementation. The overriding picture that emerges is one of organisational turmoil, uncertainty and low moral among staff during a merger process. Ultimately, the disruption brought about by the merging of two companies can lead to a significant resistance to change, and result in negative consequences for the organisation. Of course, these effects would vary in intensity on a case by case basis. However, the high failure rate of mergers (as per the table of failed mergers above) is worth noting and adds weight to the impression of mergers as high risk ventures.

For a merger strategy to be considered, the situation at hand needs to be evaluated based on the presence of significant risk factors that have been associated with failed mergers in the past. The key factors in this respect are:

- The compatibility of the two organisations;
- The co-operation between the two management teams; and
- The coherence and speed with which the integration strategy can be implemented.

Based on these factors, a number of immediate warning flags can be identified with regard to the case study at hand. As is revealed in the stakeholder requirements review in chapter 6, the antagonistic relationship between the two major parties in this integration-project presents a significant danger to the achievement of merger success. Additionally, the significant difference in operational and organisational structure between the two parties once again increases the difficulty of successful integration. As a consequence of these differences, the lack of a shared vision between the two parties raises the concern that the creation of a coherent integration strategy will be extremely challenging should a full merger between these two parties be selected as the way forward.

In conclusion, an overview of the characteristics and challenges of historical mergers leads to a preliminary view that a merger strategy is not the ideal solution to the problem at hand. However, a more detailed assessment will be made once additional strategies and situational factors have been examined. As a contrast to a merger strategy, the integration strategy to be examined in the next section requires a less dramatic change in the organisational structure of the entities involved and is therefore less disruptive to the stakeholders involved.

3.3 INTER FIRM ALLIANCES AND JOINT VENTURES

According to Adobor (2004:1), co-operative strategies in the form of inter-firm alliances have become an important strategic tool of firms across the industrial spectrum. Adobor defines inter-firm alliances as:

"Inter-organisational relationships in which autonomous firms collaborate toward some common objective. Such collaboration often creates non-trivial, bilateral dependence between the partners."

Joint ventures are a form of co-operative strategy in which co-operating partners set up a separate entity which is charged with undertaking a specific purpose. Joint ventures could therefore be considered to be a sub-class of co-operative strategies. According to Abodor (2004:1), joint ventures are generally equity based relations in which partners may have equal or disproportionate equity.

Young and Bradford (1977:11) define a joint venture as follows:

"An enterprise, corporation or partnership formed by two or more companies, individuals or organisations at least one of which is an operating entity which wishes to broaden its activities for the purpose of conducting a new profit-motivated business of permanent duration. In general the ownership is shared by the participants with more or less equal distribution and without absolute dominance by one party."

The joint venture need not be carried out through the means of a separate corporation or legal entity. According to Herzfeld (1990:3) this definition can be adapted to include additional forms of joint ventures that do not necessarily adhere to all of the criteria in this description. Therefore, the distinction can be made between the creation of a new joint venture company or entity, and the simple conclusion of a joint contract between two separate organisations, without establishing any new entity or organisation. These options

will become particularly relevant in this case study as the stakeholder requirements relating to the integration model are discussed in chapter 6.

Joint ventures are usually established for an indefinite period. However, in the case of contractual joint ventures, such as in the case of the intended Transport Entity for Nelson Mandela Bay, this does not necessarily apply, since the joint venture will only exist for as long as the contract with the Municipality is in place. However, Herzfeld (1990:4) states that once the joint venture requires a separate management set-up instead of the part-time attention of the participants' management, it has enough in common with permanent joint ventures to be included in this definition.

A significant requirement is that the joint venture must be controlled by both the joint venture partners, rather than being dominated by one of the parties. According to Herzfeld (1990:4), a management contract can be drafted to specify the management setup of the new venture. Once this is contractually defined, the actual shareholding of any one participant is of secondary importance.

Despite the above, Young and Bradford (1977:13) state that for practical reasons the inequality in shareholding should not extend beyond a 60 percent to 40 percent ratio. Franko (1971:19) suggests that a more significant disparity in shareholding usually results in one party eventually buying out the share of the other partner, leading to the demise of the joint venture as a result. Based on the literature, it is therefore advisable to retain as close to an equal division of shareholding as possible.

3.3.1 Reasons for the creation of a joint venture

According to Herzfeld (1990:10), reasons for entering into joint ventures include opening new territorial markets, developing and exploiting new product opportunities, merging related activities or just regrouping existing activities. Kay (1993), as cited by Kippenberger (1997:8) describes one of the most important motivations behind joint ventures as the expectation that a transfer of skills and expertise will lead to shared benefits for both partners in the relationship.

However, according to Herzfeld (1990:10) the most common reason for the creation of a joint venture is for the specific purpose of tendering for a specific contract or contracts. In this case an agreement can be drafted initially for the tendering stage only. A contract can be attached to the agreement stating the execution of the project, should it be won, and which will come into force automatically if the contract is awarded under the agreed upon conditions. In such a joint venture, the parties will usually share various aspects of the larger contract between them, and the justification for the joint venture would be that the two participants are able to present a more convincing bid jointly than they could on their own. If the respective parties are not able to offer the full service on their own, then the case for a joint venture is even stronger, as the alternative would see them excluded from the contract altogether.

This is exactly the situation that the bus and taxi industries in Nelson Mandela Bay are faced with. According to the requirements of the Department of Transport and the Nelson Mandela Bay Metropolitan Municipality (as revealed by the empirical study results in chapter 6), a negotiated contract for the provision of public transport in the Metropolitan area can only be concluded with a service provider that includes both the former bus and taxi industries. The social agenda behind this requirement is discussed in more detail in chapter 6. For the purposes of selecting an integration strategy, the important fact is that this requirement exists and must be accommodated in the integration model that is followed. The difficulties imposed by this stipulation are partly mitigated by the fact that the type of service that must be delivered – both feeder and trunk services – requires the experience of both industries. The bus industry is able to provide expertise and infrastructure required for trunk-bus operations, while the taxi industry can provide the mini-bus services required for the feeder route operations. Therefore, once a suitable integration model is implemented, the operational expertise of the newly integrated parties will be complimentary and suited to fulfilling the requirements of the transport contract.

According to Berg and Friedman (1978:30), as cited by Herzfeld (1990:21), most joint ventures are the result of unique circumstances and are aimed at achieving organisational goals that neither parent organisation could attain by acting alone. The majority of large organisations would prefer a viable alternative to starting a joint venture. It is only when the necessities of a particular situation leave the company with no viable alternatives that the firm will attempt a joint venture in order to meet its organisational goals.

This suggests that many joint ventures are entered into with reluctance by one or more of the parent organisations. Herzfield (1990:21) states that in many instances joint ventures are not entered into for their intrinsic merit but as a second best solution. This in itself creates an increased risk of failure.

However, according to Berg and Friedman (1980:85), as cited by Herzfeld (1990:21), the discontinuence of some joint ventures in their original form need not be considered as a failure. Instead, the circumstances of the case might explain the reasons for the change in status. In some cases, the circumstances that led to the original purpose of the joint venture may change over time, necessitating a review of the agreement. In other instances, joint ventures are created by two parties who were considering a merger, but were not certain of their mutual compatibility. In order to limit their risk, a joint venture is then created as an intermediary step that will hopefully lead to an eventual merger.

Again, this is a very accurate description of the situation faced by the bus and taxi industries in Nelson Mandela Bay. Mutual compatibility between the two parties emerged as a serious concern during the examination of a merger strategy. However, the requirements of the transport contract make the integration of the industry a business imperative. In this context, a joint venture model emerges as an option worthy of serious consideration for the achievement of the business goals of the stakeholders.

As can be seen by the above, there exists multiple reasons for the creation, continuity and termination of joint ventures. In the section below, the characteristics and requirements of a joint venture are examined in more detail.

According to Herzfeld (1990:35) the most suitable legal form for a joint venture is influenced by the applicable laws of the country in question. The relevant tax legislation in particular, will play a significant role in determining which legal structure is optimal for the planned joint venture. Generally, three legal forms are utilised for the creation of joint ventures:

- A purely contractual joint venture;
- A partnership; and
- A limited liability company.

In cases where a joint venture entity is for some reason undesirable, a joint venture contract will be a viable alternative. In such a case, the contractual agreement between the parties will seek to duplicate as closely as possible the characteristics of a company, without establishing a separate legal entity. Herzfeld (1990:35) states that a purely contractual setup would not usually be suitable for ventures of an undefined duration.

In a solely contractual relationship, one of the key aims of the contract will be to define the liabilities of the parties towards each other. The importance of default clauses in the contract should not be overlooked. This serves both as a disincentive for one party to default on their side of the contract, and as a method by which the joint venture can be continued despite any such default on the side of one of the parties. In the end, a solid contractual agreement provides assurance to the client of the joint venture that the agreed upon service will be rendered, irrespective of the fact that disagreements may arise between the parties that participate in the creation of the joint venture (Herzfeld, 1990:37).

Limited liability company

According to Herzfeld (1990:38), the majority of long-term joint ventures are operated by establishing a new corporate entity. The chosen legal format will vary from country to country. In South Africa it will usually be a private limited company – (Pty) Ltd. Herzfeld (1990:5) states that shareholding should be divided as evenly as possible between the two

joint venture partners, within a range of 60%-40% on either side. While the shareholding will determine the division of ownership of the joint venture between the respective parties, it is a separate contractual agreement between the parties that will determine the important issues such as management representation, decision making and the respective responsibilities both parties should fulfill with respect to the new joint venture entity.

In Nelson Mandela Bay, a key issue of contention that has emerged during negotiations between the parties (see chapter 6) is the relative shareholding of the partners. A welldefined contractual agreement is one way in which issues such as control of the operation, decision making and representation on the board of directors can be addressed without relying on the relative shareholding of the partners. This is examined in further detail in chapter 7, where the most important issues that the contract should address, are reviewed.

3.3.3 Inter-organisational challenges of joint ventures

Bartoloma, et al., (2003) state that small differences in management style and culture between the co-operating firms in a joint venture can become serious problems due to the limiting effect it has on the creation of synergies.

While some of these issues, such as differences in size and structural design, can be identified up front, many others such as honesty and trust are harder to evaluate until the relationship has been established.

Herzfeld (1990:25) contends that conflicts of interest are a natural outflow of the operation of the majority of joint ventures. Often one of the participants will pursue benefits for himself rather than for the joint venture. In fact, from the very beginning participants could be looking ahead to benefits that are attainable through the termination, even through the *premature* termination of the joint venture. Herzfeld describes this as "competitive collaboration", or "takeover by stealth."

Koeszegi (2004:7) states that the building of trust is an integral part of inter-organisational negotiations. Kippenberger (1997:1), focuses on the issue of trust by applying game theory as demonstrated by the well known "Prisoner's Dilemma" to the relationship between joint

venture partners. The prisoner's dilemma (attributed to Albert Tucker) represents a hypothetical situation where two prisoners are accused of committing a crime together. They are separated and prevented from communicating with one another in any way. Despite having no hard evidence against them, the sheriff presents the following information to each of the two: If they both confess, they will get a relatively light (seven year) sentence. If only one prisoner confesses, he will go free with a reward, while the other will get ten years in prison. If neither confesses, they will both be given one year sentences.

Each prisoner can decide how he will respond, but the outcome of his response will depend on the actions of the other prisoner. The possible outcomes can be shown in a payoff matrix, which is presented below.

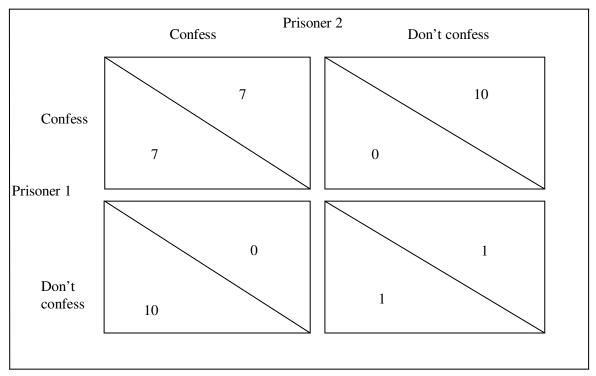


FIGURE: 3.2 PRISONER'S DILEMMA PAYOFF MATRIX

(Source: Adapted from Kippenberger: 1997)

As can be seen on the payoff matrix, the level of trust between the prisoners will determine the payoff that each will receive. If they don't trust each other, both are likely to confess, since they will suspect the other will try to serve their own interests first. As a result, both will end up with seven years imprisonment. This is far from the most favourable result where, if they had trusted one another, neither would have confessed, trusting the other to do the same. Then they would both have received only a one years sentence. The conclusion is that due to the need to serve their own interests first and foremost, and based on a lack of co-operation between the two parties, the full benefits of the partnership were not realised. Instead, the self interest of each prisoner led to a less than satisfactory result for both.

Kippenberger uses this principle in explaining the relationship in a joint venture. Each firm will be unsure of how the other will behave. Despite the inherent benefits of total cooperation, if one firm holds back, game theory suggests that the second will hold back too. And even if the one firm co-operates, distrust by the other party will still lead them to see a possible benefit in not reciprocating, as this will be the safer option. By holding back, the second firm will gain benefits from the co-operation of the first firm, without having to share those benefits with the other party. Since both firms will use this reasoning, the likely result of the joint venture is that both firms will hold back from full co-operation with the other.

So how can the parties in a joint venture break through this dilemma? According to Kipenberger, this can only be achieved through the establishment of a long term relationship between the parties. In the initial exchanges, the self-serving choices of both parties will be based on mistrust and suspicion. This is particularly reminiscent of the situation between the bus and taxi industry in Nelson Mandela Bay. However, once the "game" has been repeated an uncertain number of times, the pessimistic view of this outcome could change as a form of co-operation is gradually established. Game theory suggests that the players would react in a "tit-for-tat" manner. If one party is nice, the other will be too, the next time around. In the same way, if one party acts in self interest, the other will follow suit in the next round of decision-making. As the relationship develops over time however, the players will eventually behave in a manner that leads to the greater long-term benefit of both partners. In this way, the prisoners in the original scenario will learn that it is better for both if neither confesses to the crime (Kippenberger, 1997:2).

The prisoner's dilemma deals with the issues relating to cooperation between joint venture partners on an inter-firm level. Bartoloma (2003:1), in turn, focuses on specific consequences of joint ventures from the internal perspective of a cooperating firm.

According to Bartoloma (2003:2), a strategic alliance usually introduces a series of changes in the co-operating organisation's behaviour. These changes can result in conflict with the firm's personnel and even lead to failure of the co-operation between the two entities. Conflicts often arise at points in the implementation where individuals who have not been involved in the negotiations up until that point, are affected by the change. These individuals can be a threat to the negotiated agreement for a number of reasons, which are listed below:

- Their lack of involvement in negotiations may mean that they do not understand the strategic benefits or even necessity of the co-operative strategy;
- Low ranking employees may be less experienced at working with people from other cultures;
- There may be individual groups who oppose the proposed relationship based on independent interests which differ from those of the organisation as a whole; and
- Some executives may consider the alliance to be a threat to their positions.

According to Bartoloma (2003:2):

"...the cornerstone for the implementation of an effective co-operative strategy is an appropriate management that tries to obtain the personnel's wholehearted collaboration."

Due to natural organisational resistance to change, this goal can be extremely challenging, however. Bartoloma concludes that human and cultural aspects alone can decide the success or failure of a corporate alliance. Therefore, the need for the leadership from both sides to be well versed in this field is of paramount importance.

3.3.4 Operational challenges of joint ventures

Herzfeld (1990:24) states that joint control of an organisation means joint decision making. This naturally is a difficult adjustment to make for executives who are used to being in total control of the decision-making process at their organisations. This problem extends beyond the narrow issue of decision-making, and includes the broader concept of the management style of the organisation. Everything that can be affected by this management style now becomes part of this issue.

This problem is accentuated where the management styles of the two parties to the joint venture contrast, specifically from the perspective of centralised versus divergent decision-making. Under a centralised management style, decisions are taken fairly quickly, whereas the resolution of issues takes significantly longer under a more divergent management approach. This difference in the timescales of decision-making can generate significant stresses between the partners (Herzfeld, 1990:24).

An extremely important issue is the composition of the joint venture's board. It is vital that it function effectively, yet to do so its members will be required to regularly attend meetings, which may necessitate the exclusion of top board members from one of the parent companies due to existing commitments in their current positions. This can present difficulties if the representation from the board of the other parent company is not restricted in this way, as it can be seen as a lack of commitment from one side of the partnership (Herzfeld, 1990:24).

A further complication is that joint ventures are usually initially staffed by seconding employees from the parent companies of the joint venture. This is understandable, given the possible temporary nature of the joint venture, and the lack of job security that this implies to a prospective employee. A secondment makes sense, since any employees that are no longer needed at the termination of the joint venture can simply return to the parent company which holds their employment contracts.

While this makes sense from a practical perspective, it also means that employees will remain loyal to the parent company rather than to the joint venture company, which could lead to further conflict and undermining of the position of the joint venture. It should also be noted that since the circumstances surrounding the joint venture are not static, and as changes occur over time, whether they be successes or unforeseen difficulties, the views of participants may also change accordingly. This means that the position of the joint venture is always accompanied by a lot of uncertainty (Herzfeld, 1990:25).

3.3.5 Drivers of joint venture success

In the previous section, the challenges of joint ventures have been duly examined and discussed. However, as in the case of merger strategies, these challenges are not insurmountable. Their resolution merely requires proper planning, effective leadership and the implementation of a people-focused change management process. In this section, the key aspects of such a process are discussed.

Preparing leadership to manage change

According to Harris Helmer (2002:1) the leadership of an organisation contemplating a joint venture need to be educated on how to manage change effectively. Management need to be prepared to deal with the issues that will inevitably arise out of the change process.

Firstly, individuals in management positions need to explore and learn to manage their own reactions to change. The attitude of management will have a significant impact on lower level staff, and therefore, any management frustrations and negative feelings surrounding the change process need to be managed in such a way that it does not flow through to their subordinates in the firm.

Preparing the leaders of the bus and taxi industry for the challenges of the integration project is a necessary pre-requisite to the successful management of the integration process. Without a core group of influential leaders that support and drive the process, there can be little hope of steering the organisations in their entirety through a successful change process.

Dealing with the impact of change

Every individual views organisational change from the perspective of how he or she will be personally affected. Therefore, employees need to be assisted to navigate through the uncertainties of the change process. In order to make informed decisions about their lives, employees require accurate information about how the joint venture process will affect them. According to Harris Helmer (2002:2), few of the details regarding the change process are usually available when the joint venture is first announced. Leaders are therefore confronted with a difficult decision. They can either share incomplete information with employees, which can generate a lack of confidence in the change process, or they can withhold information from their subordinates, which can generate an atmosphere of suspicion, mistrust and lead to the spread of misinformation.

Harris Helmer(2003:2), therefore, recommends that leaders share the information that they have up front and then lay out a clear timeline with the steps that still need to be taken to manage the expectations of employees going forward. The longer the dissemination of information is delayed, the greater the danger of increased concerns, rumour mongering and uncertainty that will lead to resistance to the change.

The taxi industry in Nelson Mandela Bay consists of more than 2000 individual operators. Similarly, the bus industry employs hundreds of staff members to run their current operations. Each of these individuals will be concerned about the consequences that the integration of the two industries will have for them as individuals. Yet negotiations cannot be conducted with every single affected individual. Therefore, the impact of the change on each person must be considered and the impact on the process evaluated. Integration planning should then be made with these factors in mind. Perhaps the most important factor identified as a contributor to successful change management, is communication.

Communicating the change

Harris Helmer (2002:2) advocates the concept of "leading from the heart and following with the head". This means that the leadership first has to win over the hearts of employees before they will follow them with their heads. Therefore, the manner in which the change

process is communicated through to stakeholders is extremely important. The best way to achieve this, according to Harris Helmer (2002:2), is to first communicate the benefits that the change will have for the organisation and in particular, for the individuals themselves, before acknowledging the impact that the change will have on the lives of stakeholders. Therefore, the "why" of the change is discussed and emphasised with the affected individuals first, before the "what" and the "how." Often leadership is so eager to define the timeframes, details and requirements of the proposed change that they overlook the need to first give employees the opportunity to grasp the need for the change in the first place.

In the case of the taxi and bus industry integration this challenge will be exacerbated by the fact that the leadership of the two organisations are distrustful of their counterparts and to some extent remain to be convinced of the merits of such a proposed integration. Therefore, the need for a clear integration process, and an open and honest communication policy is of particular importance.

Leadership also needs to be careful with the expectations that they are creating during the change process. The concept of "under-promise and over-deliver" is a vital one during a joint venture change process. During the period of uncertainty, the change team is under immense pressure to provide stakeholders with guidance, certainty and clear answers to important questions. This pressure can lead the leadership to make unrealistic promises and guarantees such as when the agreement will be reached, when more information will be available or how many jobs will be created in the new joint venture. According to Harris Helmer (2002:2), it is best not to promise anything. Should the leadership wish to share timelines with employees and other stakeholders, care must be taken to emphasise that these timelines are tentative.

Employees place great reliance on any promises made during this period, and should any of them remain unfulfilled or require modification, the impact can be devastating. The golden rule thus, remains "under-promise and over-deliver." In general, a balance should be struck between saying too much or saying too little. That is why a change process is so challenging, and why it is so difficult to negotiate successfully. Due to the challenges and resistance experienced in the transport industry integration in Nelson Mandela Bay, it would be extremely tempting for leadership to share the "good news" with sceptical stakeholders to get their initial buy-in into the project or to counter mounting resistance during the early or middle stages of the integration. However, should some of these raised expectations not be met as promised, the consequences could be significantly worse than if expectations were managed properly right from the start.

Working with the survivors of the change

The net effect of organisational change will be that some employees will leave the firm due to job losses, job changes or the transition of some employees to a new organisation. Once these changes have settled in, it is important for leadership to focus on the interests and futures of those who remain with the organisation after the changes have been completed. Harris Helmer (2002:2) states that leadership in the past has focused too heavily on catering properly for those who were leaving the firm at the expense of those who survived. It will be the survivors who will carry the firm's operations forward, and on whom the future success of the organisation will depend.

Survivors should be given the opportunity to settle into the changed environment they will be faced with and be given a sense of security regarding the future with the organisation. They should be given a chance to grieve over the loss of some of their former colleagues. To this end, the facilitation of a series of structured discussions regarding their experiences during the change process can be of great benefit to the organisation.

Protecting the business from change

According to Harris Helmer (2002:3), a critical aspect that leaders should prepare for, is the protection of the business during the turbulent times of change. The uncertainty experienced during a change process can have significant impact on the productivity and performance of employees. It is the responsibility of leaders to monitor the warning signs of potentially disruptive behaviour and to manage the employees reaction to the change process to the greatest extent possible.

3.3.6 Suitability of a joint venture strategy

The advantages offered by the creation of a joint venture depend largely on the unique circumstances that necessitated the parent companies to consider an alliance in the first place. General advantages can vary from providing a limitation to the investment required from each partner in the venture, to the limitation of the risk of failure of the enterprise. A significant advantage can also be gained from the merging of the skills and expertise of the two participating organisations. Herzfeld provides the example of one company contributing great technical skills while the other partner provides the financial resources to make a joint success of a project or enterprise (Herzfeld, 1990:23).

For the Nelson Mandela Bay integration project, a joint venture model addresses the following key stakeholder requirements, as revealed in chapter 6:

- It will allow for the required integration of the two industries;
- It will allow each of the parent organisations to retain their separate identities;
- It will allow for the successful transfer of skills from the bus to the taxi industry;
- It will ease the change process, as a joint venture will not be as radical a transformation as the total merging of the two industries;
- It will allow the two industries a trial period of 10 years during which they can explore the viability of a full merger;
- It will allow each of the parties at least the opportunity to withdraw from the joint venture should they feel disadvantaged by the process; and
- It will enable the process to be approached as a "partnership between equals".

The joint venture approach is therefore able to address a number of the shortcomings of a merger strategy in the case study scenario, specifically that of the retention of the individual identities of the participants. At the same time, a joint venture strategy is still able to duplicate the majority of the integration characteristics of a merger strategy, such as the transfer of skills and the conclusion of joint contracts with the NMBM. In the light of the

above, it would appear that a joint venture strategy offers a more viable and universally acceptable overall solution to the main research problem than a merger approach.

3.4 CONCLUSION

In this chapter, two prominent options for the creation of an integrated transport entity have been introduced. In each case the characteristics of the strategy were examined, the challenges considered and the advantages and disadvantages reviewed. To provide a transport service based on the strategic, political and contractual requirements of the scenario, the parties involved will need to be integrated into a unified entity or small number of entities. The strategies discussed in this section provide the most commonly employed methods of achieving such integration between business partners.

After completing the literature study, a joint venture option appears to be significantly more viable than a merger between the two industr ies. This conclusion is based on the following key factors:

- The contrasting organisational cultures of the participants in the integration process make a merger less likely to succeed than a joint venture;
- The ability to retain the separate identities of the participating organisations in a joint venture, as opposed to a merger where the participants are joined together on a permanent basis;
- The ability to provide a viable exit strategy for all participants by simply ending the joint venture contract. This option is not available in a merger, where the previous identities of the partners have been totally merged;
- The mistrust and lack of co-operation that exists between the leadership of the respective participants make a merger strategy extremely difficult to undertake successfully;
- A joint venture provides for an easier transition for the participants from competitors to partners, and allows them to explore the possibility of a full merger at a later stage; and

• The fact that the integration is taking place for the purpose of meeting the requirements of a specific, fixed-term tender or contract corresponds to one of the key reasons for considering a joint venture strategy. After the contract ends, all participants are free to go their separate ways once more.

The above factors strongly indicate that a joint venture strategy is the more viable option for this case study. However, the literature study also highlighted the risks associated with a joint venture strategy, and emphasised in particular the critical importance of the building of trust between the partners in the venture. The need for open and honest communication and honourable negotiations between the parties is such that without it a successful outcome will be very difficult to achieve.

Given the above, further investigation is required before a final decision can be taken with regard to the most suitable integration strategy for this case study. In the next chapter, strategies utilised by other cities will be investigated and compared to the scenario faced in Nelson Mandela Bay. In chapter 6 the key requirements generated by the stakeholder consultation process will be discussed. Using all of the information gathered in previous chapters, the strategies will then be evaluated in chapter 7 and a final option selected which best meets the criteria produced during the research process.

CHAPTER 4

INTERNATIONAL STUDY – INTEGRATED TRANSPORT SYSTEMS DEVELOPED BY OTHER CITIES

4.1 INTRODUCTION

In October 2007, the author was part of a fact-finding delegation from Nelson Mandela Bay that visited the cities of Bogota and Perreira in Colombia, to study the transport models which have been implemented there. Several presentations were conducted by representatives of Transmilenio and Megabus, the companies that operate the transport systems in Bogota and Pereira respectively. The facts that emerged from the presentations showed that the transport environment in these cities display significant similarities to that of Port Elizabeth. The data gathered during this visit is presented in the remainder of this chapter as documented by the author while in Colombia.

4.2 BOGOTA

Mr. Edgar Sandoval, former General Manager of Transmilenio, presented the model implemented by Transmilenio in Bogota.

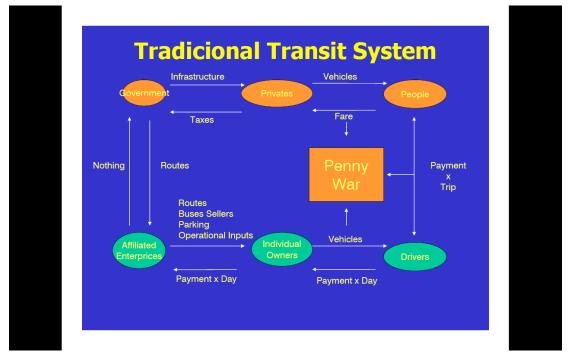


FIGURE 4.1 HISTORICAL TRANSPORT SYSTEM IN BOGOTA

(Source: Edgar Sandoval, Bogota Transport presentation, October, 2007)

The diagram above depicts Bogota's historical transport system. Spelling errors are due to the incorrect translation from Spanish to English by the original source of the diagram. Bogota's system relied on individual taxi and bus owners for the provision of public transport to commuters. This is very similar to the historical situation in South Africa. Routes were awarded to "affiliated enterprises" who acted as middlemen between government and the individual owners. Vehicle owners had to pay these middlemen in order to operate their private bus and taxi services on specific routes. The owners, in turn, provided their vehicles to the drivers, who guaranteed an agreed upon daily payment to the owner in exchange for the vehicle. Finally, the driver would then operate the vehicle and collect fares from commuters.

This system generated significant inefficiencies as each of the intermediaries in the transport chain needed to skim profit out of the system to survive. In addition, the system incentivised drivers to transport the maximum number of passengers per day in order to maximise their profit over the standard payment made to the vehicle owners. Therefore, as in South Africa, overloading of buses, chaotic and irresponsible driving practices and lack

of adherence to schedules were the order of the day, as drivers competed for passengers on each route.

The end result was that the intermediaries benefited out of the situation at the expense of commuters. The system also resulted in an overcapacity of vehicles and increased congestion on the roads, as large numbers of small vehicles inefficiently competed to transport the growing population of the city on the limited road network.

In 2000 a new mayor, Enrique Penalosa, took control of Bogotá and concluded that the negative incentives embedded in the institutional and organisational setup were to a large extent responsible for the low level of service and chaos in the streets. Peñalosa appointed a team of experts to design a system that would eradicate the "penny war" for transportation routes.

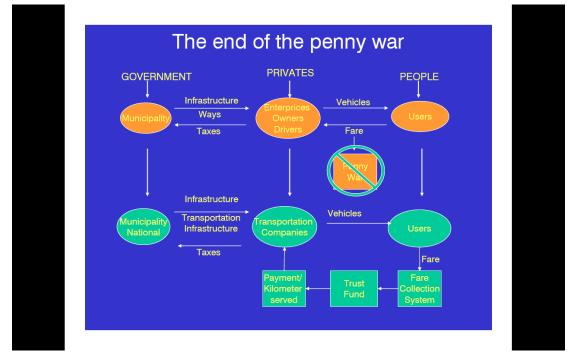


FIGURE 4.2 REDESIGNED TRANSPORT SYSTEM IN BOGOTA

(Source: Edgar Sandoval – Bogota Transport presentation, October, 2007)

The diagram above depicts the re-designed transport system in Bogota, and the resolution of the problems associated with the old system. In the new system, the individual vehicle owners were required to buy shares in new companies that led to the consolidation of the multiple individual operators into a small number of transport entities. Owners purchased shares on a voluntary basis if they wished to form part of the new system.

The municipality then awarded transport contracts directly to the new transport companies on an open tender basis. The intermediaries were therefore, completely removed from the chain as the contractual arrangement now existed directly between the service provider and the local government. The companies were paid per kilometer traveled according to the contractual agreement, not per passenger carried. This is an important distinction, as it removed the incentive for overloading or rogue activity on behalf of the operators.

Drivers were now issued formal employment contracts by the transport companies and with no incentive left to compete for extra passengers, the need for irresponsible driving was completely removed. In fact, the formal contractual arrangement between the city and the transport companies allowed the municipality to include specific penalties for lack of compliance with specified safety and operating standards. Financial incentives in the end proved to be highly effective, and the penalty/bonus system ensured that each company tried to outdo its competitors in trying to meet their specified contractual requirements (Edgar Sandoval – Bogota presentation, October, 2007).

The transport companies benefited from dedicated bus lanes that the city constructed for their exclusive use, with the result that their services could be provided more efficiently and effectively than private operators who chose to continue operating independently rather than join the new companies. Commuters also benefited from a new, scheduled and reliable transport system that provided them with a significantly more efficient manner of transport within the city (Edgar Sandoval – Bogota presentation, October, 2007).

4.2.1 Contracting of companies

In Bogota, seven companies were contracted to operate the trunk route services and six to operate the feeder routes. These companies were required to submit detailed proposals in response to the tender request, based on the requirements stipulated by the city. The winners of the bidding process were awarded ten-year concessions to operate on specified routes in the BRT system. They were selected purely on the business case they presented, with the best bids being awarded the biggest fleet in the contract. Kilometers were then allocated to the seven trunk line operators by the government based on the number of buses owned. For example, if there were 200km of trunk routes to be assigned, the operator who owned 150 out of 200 buses would be assigned 150km to operate on (Edgar Sandoval – Bogota presentation, October, 2007).

4.2.2 Comparison with Nelson Mandela Bay

The Bogota model contains significant similarities to the Nelson Mandela Bay Public Transport Plan. The replacement of independent transport operators with a formalised, scheduled transport service operated by contractually appointed transport service providers is exactly the model that Nelson Mandela Bay wishes to implement. The integration of independent operators into formalised transport companies is also an example that Nelson Mandela Bay wishes to follow.

However, there are also significant differences to the South African situation. The primary difference is the fact that in Bogota the transport contracts were awarded to the operators on an open tender basis. This means that any company that met the required criteria could submit a bid for a contract. All bids would then be evaluated on a merit basis and the best bid would be awarded the contract a pre-determined number of years.

In Nelson Mandela Bay, a negotiated contract is prescribed, which requires the inclusion of all the major stakeholders in the local transport industry. This significantly complicates the formation of transport companies, since more participants need to be satisfied in the process.

In terms of the primary problem of this case study, the Bogota example demonstrates that the fundamental driver of an integrated transport service is a profitable business model. Ultimately, the transport operators will base their decision to join the new entity or not, on the financial implications it will have for them. If they are better off in the new system than they were before, they will be interested in joining it. If not, they will be very reluctant to participate. This lesson needs to be borne in mind during the development of a solution for the Nelson Mandela Bay transport situation.

4.3 PEREIRA

The Pereira presentation was conducted by the General Manager of Megabus, Ms. Monica Vanegas. Megabus is the transport agency in the city of Pereira, which has a population of roughly 1 million people (similar to Port Elizabeth). Megabus controls 53 articulated buses, 83 feeder buses, 36 stations and two terminals. Due to its comparable size to Port Elizabeth and the greater Nelson Mandela Bay area, Pereira is an even more suitable example for the Nelson Mandela Bay transport model than Bogota (Monica Vanegas, Pereira presentation, October, 2007).

In Pereira two transport companies were contracted to operate in the BRT system. Both companies operate on both the trunk route and feeder route systems. Efforts were also made to unite several smaller operators into new companies that could tender for the Megabus transport contracts. Irrespective of the success or failure of these efforts, the contracted companies were selected through a normal tendering process.

Eligibility for shares in the new companies was based on the number of vehicles owned by the independent operator that wished to form part of the new entity. The vehicles entitled the operator to a proportional number of shares in the new company. It was then up to the operator to decide whether he was interested in purchasing his allocated portion or not. In this way, small operators were able to gain access to part of the overall contract, via shareholding in contracting companies (Monica Vanegas, Pereira presentation, October 2007).

With regards to the transport contracts, each contracting company was required to purchase (and then scrap) eight old buses for each new trunk bus, and one old bus for each new feeder bus they would be operating in the Megabus system. This mechanism resulted in the removal of several hundred old buses from the road system, alleviating traffic congestion. In fact, as a result of this, the number of old buses in the city was reduced from an original 1100, to the current 550 (Monica Vanegas, Pereira presentation, October, 2007).

In addition to purchasing the old buses for scrapping, the companies were also responsible for purchasing the new vehicles that would be used in the system. Both companies operate on both the trunk and feeder routes. So the key issue identified here, is that the tendering companies required substantial access to capital in order to meet all of these requirements. The operating contracts were awarded for 17 years in Pereira. As in Bogota, the length of the contract is determined by the business model, which must provide an adequate return on investment for the companies that are selected (Monica Vanegas, Pereira presentation, October, 2007).

Megabus, like Transmilenio in Bogota, emphasised the importance of the business case in designing their system. In other words, the number and types of buses, selection of operators, fee structure and importantly, the length of the operating contracts were all based on the requirements to operate profitably per kilomter traveled, and to offer an agreed upon return on investment for the operators over the length of the contract. Megabus's only criteria for selecting the operating entities was that there be at least two – for healthy competitive purposes, and that some efforts be made to incorporate some smaller operators into the system. However, in the end, the best candidates were selected based on the business case presented (Monica Vanegas, Pereira presentation, October, 2007).

4.4 CONCLUSION

Emphasis should be placed on the fact that turnaround was achieved in both Colombian cases from old, dysfunctional transport systems to modern, scheduled services providing quality transport to thousands of commuters on a daily basis.

The old systems were based on individual operators competing in a chaotic environment for the maximum number of passengers. The new system, however, eliminated the need to compete for passengers through the implementation of a kilometer based reward system. This is similar to what government wants to achieve in Nelson Mandela Bay.

Therefore, the key to the success of the new system was based on two main elements.

The first principle is that the vehicles were no longer privately owned by the individual owners, but by the collective company instead. This meant that competition was eliminated between individual owners. Secondly, fee collection was transformed from a passenger- to a kilometer based system. These two aspects are crucial to the success of the entire model.

From an entity creation point of view, the need to have a systematic way of allocating share ownership in the new companies was also clear, especially in Pereira. The Colombia examples do not show preference towards either a merger or a joint venture strategy, as the companies formed in the cities of Bogota and Pereira were entirely new creations, and former operators were free to purchase shares in them on a voluntary basis. The need to accommodate all existing stakeholders, whether individual operators or juristic persons such as established bus companies, did not exist. This is a major difference with the Nelson Mandela Bay situation.

However, a valuable lesson that can be learned is that whatever integration mechanism is selected, it needs to ensure that every new owner brings something to the table which can be measured in terms of the value added against that of his co-owners. In the case of Pereira, the number of vehicles owned was a good yardstick to use. In the case of Nelson Mandela Bay, the possession of a valid operating license would serve as the entry requirement for potential shareholders in the new structure.

The length of the contract would determine the number of total kilometers allocated to a company over the course of the contract. That in turn, would determine the total revenue of the company over the full term of the contract, which would determine whether an adequate return is earned for the capital invested at the start. An operator's decision to join the new company or not would therefore, be purely based on the financial return that the investment offers to him. Ultimately, it can therefore be seen that the business case influences almost every facet of the project, and should be a key factor in every decision pertaining to the transport plan as a whole.

The visit to Colombia was extremely useful in providing case studies similar to the transport model that Nelson Mandela Bay is planning to implement, dealing with similar issues, challenges and suggested solutions. The key to success will be to use what was

learned in Colombia, but to apply it in a South African context to resolve the uniquely South African challenges that Nelson Mandela Bay is presented with.

CHAPTER 5

RESEARCH DESIGN

5.1 INTRODUCTION

This chapter addresses the research design, methodology and methods of data collection used in this study. A detailed discussion of each of these aspects will be presented. The focus of the research design and methodology will be to answer the main research problem, i.e.

How can the bus and taxi operators in Nelson Mandela Bay be integrated into a single entity, or small number of entities, in order to provide a viable, efficient and sustainable public transport service?

5.2 RESEARCH DESIGN

According to Collis and Hussey (2003:113), research design is the detailed plan which guides and focuses the research.

5.3 SOURCES OF INFORMATION

Information was gathered through both primary and secondary research, as indicated below.

5.3.1 Primary study

The primary study was based on a case study of the Nelson Mandela Bay transport integration project. The author of this paper was directly involved in the project over a period of approximately one year. The goal of this project was to incorporate the formerly independent transport operators in the region into a new, integrated operating entity. The process that was followed to develop an integration model that achieves the project goal is documented in this paper.

In order to develop a solution that is suitable for Nelson Mandela Bay, it is necessary to understand the complete set of stakeholder requirements that the solution will need to address. To achieve this, it is necessary to identify the relevant stakeholders in the proposed project. The exercise of compiling a list of stakeholders falls outside the scope of this paper, as it was provided to the project team by the Nelson Mandela Bay Municipality based on an extensive and lengthy stakeholder identification process. For reasons of confidentiality, the names of the individual representatives for each of the stakeholder groups were withheld. However, the stakeholder groups represented are listed below. For the purposes of this paper, the key stakeholders are defined as:

- The Nelson Mandela Bay Municipality;
- The Department of Transport;
- Algoa Bus Company;
- The Port Elizabeth Private Bus Operators Association; and
- The local taxi industry.

The primary study took place over the course of approximately one year and consisted of a number of separate yet overlapping stages. The first stage involved semi-structured interviews through which an in-depth picture of the stakeholder priorities and requirements could be compiled. This data was used in the development of a conceptual integration model. In the second stage, this model was taken back to the participants through a round of focus group discussions in order to gauge the level to which it satisfied their requirements.

In a separate work stream to the above, the observation method was utilised as a primary data gathering technique during the fact finding visits by the author to the cities of Bogota and Pereira in Colombia, where successful transport integration initiatives have been implemented. The findings from the study visit to Colombia served as important inputs into the development of an integration model for Nelson Mandela Bay. The data collection methods utilised in the primary study can therefore be summarised as the following:

- Interviews;
- A focus group exercise; and
- Observation.

Each will be discussed in more detail later in this chapter.

5.3.2 Secondary study

The secondary study consisted of a review of relevant literature in order to answer the subproblem "what strategies are revealed in the relevant literature than can assist in the development of an integrated public transport entity?" Two generic integration strategies – a merger and joint venture strategy – were examined and assessed in terms of their suitability for the development of the required solution. The results of this study provided an important theoretical framework within which the development of an integration model for the transport entities in Nelson Mandela Bay could be approached.

5.4 RESEARCH PARADIGM

Collis and Hussey (2003:47) make a distinction between two main research paradigms or philosophies. These are referred to as the positivist and phenomenological paradigms respectively. Broadly speaking, the positivistic approach is based on the belief that the study of human behaviour should be conducted in the same way as studies of the natural sciences. Therefore, according to the positivistic approach, the facts of social phenomena should be studied with little regard to the subjective views of the individual. Explanations are arrived at by establishing causal relationships between variables and linking them to an integrated or deductive theory.

In contrast to this, the phenomenological paradigm focuses on understanding human behaviour from the participant's frame of reference. The research methods used under this approach are interpretative techniques which seek to describe, translate or otherwise come to terms with the meaning of naturally occurring phenomena in the social world (Collis and Hussey, 2003:53).

The table below presents the contrasting features of the positivistic and phenomenological research paradigms.

Positivistic paradigm	Phenomenological paradigm
Tends to produce quantitative data	Tends to produce qualitative data
Uses large samples	Uses small samples
Concerned with hypothesis testing	Concerned with generating theories
Data is highly specific and precise	Data is rich and subjective
The location is artificial	The location is natural
Reliability is high	Reliability is low
Validity is low	Validity is high
Generalises from sample to population	Generalises from one setting to another

TABLE 5.1 POSITIVISTIC AND PHENOMENOLOGICAL PARADIGM CHARACTERISTICS

(Source: Adapted from Collis and Hussey, 2003:55)

Considering the contrasting features of the two paradigms, it becomes apparent that a phenomenological research paradigm would be most appropriate to the nature and context of this study. The selection of a phenomenological approach is validated by the following characteristics of the study.

The study of the integration process of the transport industry in Nelson Mandela Bay relied on qualitative rather than quantitative data. Observation, in-depth interviews and focus group discussions were the key techniques employed to gather primary data for the study. Collis and Hussey (2003:55) state that the use of qualitative data is most often associated with the phenomenological research paradigm.

The sample size in the study was small, as it was limited to key representatives of the main stakeholders in the process. The aim was to obtain an in-depth understanding of the requirements of the stakeholders involved, rather than to conduct statistical analysis. This corresponds to the characteristics of a phenomenological research approach, which, according to Collis and Hussey (2003:57) places emphasis on the quality and depth of the data, the richness of the detail and the nuance of the phenomena being studied.

The aim of the research study was to develop a new theory by which the main research problem can be solved, rather than testing an existing hypothesis. According to Collis and Hussey (2003:56), this approach is a key feature of the phenomenological research paradigm.

5.5 RESEARCH METHODOLOGY

Collis and Hussey (2003:55) state that the research paradigm will have a significant influence on the research methodology that is selected for the study. The table below presents the methodologies associated with the respective paradigms.

PositivisticPhenomenologicalCross-sectional studiesAction ResearchExperimental studiesCase StudiesLongitudinal studiesEthnographySurveysFeminist perspectiveGrounded theoryHermeneuticsParticipative enquiryParticipative enquiry

TABLE 5.2 METHODOLOGICAL ASSUMPTIONS OF THE MAIN PARADIGMS

(Source: Adapted from Collis and Hussey, 2003:60)

The research methodology that was selected for this paper is that of a case study, which falls within the phenomenological research paradigm. Specifically, the resolution of the main research problem was based on a case study of the Nelson Mandela Bay transport operator integration project.

Collis and Hussey (2003:68) define a case study as "an extensive examination of a single instance of a phenomenon of interest." To corroborate this view, they cite Eisenhardt (1989:534) who describes a case study as "a research study which focuses on understanding the dynamics present within a single setting".

The exploration and understanding of context is an issue which receives particular emphasis under the case study methodology. Collis and Hussey (2006:68) cite Bonoma

(1985:204), who states that a case study "must be constructed to be sensitive to the context in which management behaviour takes place" and Yin (1994), who contends that case studies do not merely seek to explore selected phenomena, but also aim to understand them within a particular context.

The framework that emerges is that of the study of a single phenomenon, within a specific context that is examined in order to arrive at a set of findings or conclusions. Given the nature of this research study, which focuses exclusively on the integration of public transport in Nelson Mandela Bay, a case study approach is deemed to be the most suitable research methodology to follow.

According to Collis and Hussey (2003:68) case studies can be delineated into a number of categories, such as descriptive, illustrative, experimental or explanatory case studies. However, they are most commonly referred to as exploratory research, used in areas where there are few other theories or a deficient body of knowledge. This applies extremely well to the Nelson Mandela Bay transport project, as the integration of the bus and taxi industries on such as scale has not been successfully attempted in the uniquely South African context.

Collis and Hussey (2003:69), provide an outline of the main stages of case study research. This outline is provided in the table below, together with the corresponding chapter references in this paper.

	Stage	Chapter Reference
1	Selecting your case	Chapter 1
2	Preliminary investigations	Chapters 2-4
3	The data stage	Chapter 6
4	The analysis stage	Chapter 7
5	The report stage	Chapter 8

 TABLE 5.3
 STAGES OF CASE STUDY RESEARCH

(Source: Adapted from Collis and Hussey, 2003:69)

5.6 DATA COLLECTION METHODS

The data collection methods used in the case study included documentary analysis, the use of interviews, focus groups and observation. Each of these methods will be discussed in detail below.

5.6.1 Documentary analysis

This included an overview of the NMBM Public Transport Plan as documented in chapter 2, the literature study as documented in chapter 3, and an analysis of the presentations by Edgar Sandoval from Transmilenio in Bogota, Colombia and Monica Vanegas from Megabus in Pereira, Colombia, as documented in chapter 4.

5.6.2 Interviews

The most important data collection technique utilised during the research study was the interview-method. According to Collis and Hussey (2003:167), interviews are associated with both phenomenological and positivist methodologies.

Over the course of the study, an extensive consultation process was followed, during which all of the main stakeholders were interviewed on more than one occasion in order to obtain their views, input and requirements with regard to the creation of an integrated public transport entity. It should be pointed out that in each case, duly appointed representatives of each of the parties were selected as the points of contact, and their views were deemed as appropriately representative of the organisations or groups whom they were mandated to speak on behalf of. In the case of the taxi industry, signed letters of authority, mandating the elected individuals to represent their respective taxi-associations, were obtained to ensure the legitimacy of the stakeholder representatives. Interviews were conducted with the following individuals.

Stakeholder	Representative/s	Capacity
ECDRT	Confidential	Project Lead
		Representative
NMBM	Confidential	Project Manager
Taxi industry	Confidential	Chairpersons of the
		Taxi Associations
Algoa Bus Company	Confidential	Board Members
PEPBOA	Confidential	All Members

TABLE 5.4 INTERVIEWEES AND STAKEHOLDERS REPRESENTED

(Source: The author)

Constructing the interviews

Collis and Hussey (2003:168) differentiate between structured, semi-structured and unstructured interviews. Structured interviews, with closed questions which have been prepared in advance, are associated with a positivistic approach. In contrast, a phenomenological research methodology would be inclined to utilise unstructured or semi-structured interviews containing open-ended questions which have not been fully prepared prior to the interview.

For the interviews in this case study, a semi-structured interview approach was deemed most appropriate. This can be justified by the fact that the aim of the interview process was to gain a detailed understanding of the requirements and expectations of the stakeholder groups represented by the respective interviewees. Collis and Hussey (2003:168) state that unstructured or semi-structured interviews are appropriate when, amongst other criteria, the aim of the method is to "understand the construct that the interviewee uses as a basis for his beliefs and opinions about a particular matter or situation." Understanding *why* stakeholders set specific conditions for the conceptual integration model was as important as understanding *what* these conditions were. Ultimately, the underlying motivations of the stakeholders had to be understood in order to ensure that the suggested solution would meet their needs in the long term.

The existence of significant mistrust and apprehension towards the proposed integration – particularly in the taxi industry – required a particularly rich communication experience to

enable the sharing of important and sometimes closely guarded information. According to Collis and Hussey (2003:168), the process of open discovery is one of the main strengths of the semi- and unstructured interview methods. It therefore reinforces the suitability of this technique in the context of the case study.

It should be pointed out that the phenomenological and positivistic paradigms are merely on different ends of a continuum, which stretches from the one extreme towards the other (Collis and Hussey, 2003:52). Therefore, although the research study is predominantly characterised by a phenomenological approach, certain aspects of a positivistic study were incorporated, if necessary, to facilitate the most efficient and accurate gathering of primary data.

Designing questions

When designing a semi-structured interview, the researcher developed the interview strategy around the topics and issues that needed to be addressed (Collis and Hussey, 2003:178) In this case study, the purpose of the interviews was to obtain an understanding of the stakeholder requirements that the integration model would have to address. It was therefore necessary, to develop questions that would extract this data as accurately as possible. In the context of the qualitative nature of this study, and due to the need to gain a thorough understanding of the needs of each stakeholder, the interviews consisted largely of open ended questions. Where necessary, however, closed questions were utilised if a definitive answer to a question was required. With the above purpose in mind, the interviews were designed to address the following key topics:

- The expectations of the interviewee of the outcomes of the integration process;
- The relationship between the interviewee's group and the other stakeholders in the process;
- The main challenges, from the interviewee's perspective, standing in the way of the successful completion of the integration process; and
- The most important issues that the interviewee would like to be addressed in the integration process.

Semi-structured interview - Identifying stakeholder requirements

With the stated topics serving as a guide, the semi-structured interview was designed to incorporate the following core questions:

- Describe the current relationship between your organisation/group and the other stakeholders in the local transport industry;
- What are your expectations with regard to the outcome of the integration process?
- In your view, how will the integration of the bus and taxi industries in Nelson Mandela Bay affect your stakeholder group?
- What, in your view, are the main challenges that stand in the way of the successful integration of the transport operators in Nelson Mandela Bay?
- What are your minimum requirements from the process?
- What suggestions (if any) do you have with regard to a preferred integration model? and
- What are the critical issues, from your point of view, that need to be addressed in the integration process?

The findings of the interviews are presented in the next chapter as a list of key issues that required resolution from the point of view of each stakeholder interviewed.

5.6.3 Focus group

According to Collis and Hussey (2003:166), focus groups are usually associated with phenomenological research methodologies. They allow the researcher to gather data relating to the feelings and opinions of a group of people who are involved in a common situation. Focus groups produce qualitative data. Their value lies in the fact that they can provide guidance on important issues that the study should focus on, and can assist in the identification of important questions that require resolution.

The focus group technique was utilised for precisely this purpose in the case study. Focus groups were utilised at regular intervals throughout the research study whenever interim

milestones had to be presented to stakeholders for assessment. The data gathered allowed the project team to develop their conceptual model on an interactive basis with the major stakeholders, and to manage any expectation gaps that might have developed in the interim. The selection of focus group members fell outside the scope of this study, since the designated stakeholder representatives automatically served as the members of the focus groups. Therefore, this was an externally enforced parameter which had to be adhered to.

Evaluating response to conceptual integration model

The most significant use of the focus group technique revolved around the initial evaluation of the draft conceptual model. After the development of an initial hypothesis based on the key stakeholder requirements, the proposed integration model was presented to the key stakeholders for comment. The feedback obtained from this focus group activity was utilised to further develop and refine the final solution that was decided on. The results of this process are presented in chapter 7 of the research paper.

5.7 DATA ANALYSIS METHODS

The table below presents the main methods for the analysis of qualitative data.

Quantifying methods	Non-quantifying methods
Informal methods	General analytical procedure
Content analysis	Cognitive mapping
Repertory grid	Data displays
	Grounded theory
	Quasi-judicial methods

 TABLE 5.5
 QUALITATIVE DATA ANALYSIS METHODS

(Source: Collis and Hussey, 2003:254)

For this research study the quasi-judicial method was selected. According to Bromley (1986), as cited by Collis and Hussey (2003:286), this method does not relegate data analysis to the end of the research process, but instead allows the researcher to analyse the data in a continuous process. During the analysis process, the following questions should be considered:

- What is the issue?
- What other relevant evidence might there be?
- How else might one make sense of the data? and
- How were the data obtained?

The quasi-judicial method was deemed to be suitable, based on the context of the case study. Due to the qualitative nature of the research, a conclusion could not be arrived at by statistical or computer analysis, or a similar process. Instead, a holistic picture gradually needed to be constructed, based on a deep understanding of the requirements of the stakeholders. This picture could not be a snapshot in time, but instead its construction had to be an iterative process of gathering data, analysing it, developing a working model and taking it back to the stakeholders for discussions and review. This feedback then had to be used to further refine the process in preparation for the next stakeholder review. Each time this process was repeated, a further layer of understanding was built, and the eventual solution was systematically constructed.

The quasi-judicial method allows for the documenting of this organic process and the logical building of a case to arrive at the final solution to the research problem.

Bromley as cited by Collis and Hussey (2003:287) provides six rules that should be applied when utilising the quasi-judicial method of analysis:

- The investigator must report truthfully;
- The aims and objectives of the investigation must be stated explicitly;
- The achievement of the aims and objectives must be assessed;
- The investigator must be properly trained;

- The person must be placed in his or her ecological context; and
- The account must be written in good, plain English.

According to Brown and Canter (1985:243), the researcher's task is to construct a multiperspective account of the particular event he or she is investigating, drawn from the explanations given by the primary participants.

Robson (1993), as cited by Collis and Hussey (2003:287) developed Bromley's rules into a framework for the analysis of qualitative case study data. This framework is presented below.

1. State the initial problem and issues clearly.

In this case it was the main and sub-research problems, depending on which data was being analysed.

2. Collect background information to provide a context in terms of which the problems and issues are to be understood.

This was addressed in chapter 2 of this research study, where the contextual overview of the transport environment in Nelson Mandela Bay was discussed. The data gathered during the fact finding visits to Colombia adds further depth to the context.

3. Put forward prima facie explanations of the problems and issues.

4. Use these explanations to guide the search for additional evidence. If they do not fit the available evidence, work out alternative explanations.

Steps 4 and 5 are represented by the interview process that was conducted to gain a thorough understanding of the stakeholder challenges and requirements relating to the integration process.

5. Continue the search for sufficient evidence to eliminate as many of the suggested explanations as possible, in the hope that one will account for all of the available evidence and be contradicted by none of it. Evidence may be direct or indirect, but must be admissible, relevant and obtained from competent and credible sources.

This step is represented by the in-depth interview process as well as the documentary studies of the city's Public Transport Plan, presentations by officials from international cities that have conducted similar projects and the literature review discussed in chapter 3 of this paper.

6. Closely examine the sources of evidence, as well as the evidence itself. All items should be checked for consistency and accuracy. This is analogous to legal cross-examination in the case of personal testimony.

The repeated execution of stakeholder interviews served to increase the validity, consistency, reliability and accuracy of the data collected. The validity and reliability of the data will be discussed in greater detail in the next section of this chapter.

7. Enquire critically into the internal coherence, logic and external validity of the network of arguments claiming to settle the issues and solve the problems.

8. Select the most likely interpretation compatible with the evidence

9. Formulating the acceptable explanation usually carries an implication for action which has to be worked out.

Steps 7, 8 and 9 are represented by chapter 7 of this paper, in which the results of the data gathering exercises are analysed and a conceptual solution to the problem is developed.

10. Prepare an account in the form of a report. It should contribute to "case law" by virtue of the general principles employed in explaining the specific case.

This entire paper, culminating in the conclusion presented in chapter 8, serves as the report representing the research study conducted.

5.8 VALIDITY AND RELIABILITY

Collis and Hussey (2003:186), define data as being reliable if another study would obtain the same results should the research be repeated. Validity is concerned with the extent to which the research data accurately represents the situation that is being studied.

Collis and Hussey (2003:186) identify three common ways of testing the reliability of responses to questions in interviews or questionnaires. These are:

- The test re-test method, which requires the researcher to ask the same questions of the interviewee at two separate occasions;
- The split-halves method, in which the interview record sheets are split into two halves which are compared to one another to determine data correlation; and
- The internal-consistency method, where the researcher determines the inter-item correlation between every item in the entire sample.

In this research study, the test re-test method was the most suitable option, due to the fact that the study dealt with a relatively small group of key stakeholder representatives over an extended period of time. Therefore, the consistency of the answers to common questions could be tested on repeated occasions as questions were repeatedly posed to interviewees.

The validity of the data was facilitated by the fact that the interview questions were predominantly open ended and allowed the stakeholders to present important issues from their point of view. The interview process was therefore designed to reveal the underlying motivations behind stakeholder points-of-view, and was flexible enough to allow interviewees to guide the interview towards issues that were most relevant from their perspective. This ensured that the primary data gathered from the interviews was both valid and relevant to the problem at hand.

5.9 CONCLUDING REMARKS

In this chapter, the research design, data collection techniques and data analysis methods were discussed. In the next chapter the results of the empirical study, and the initial analysis, according to the quasi-judicial method, will be presented.

CHAPTER 6

ANALYSIS OF EMPIRICAL RESULTS

6.1 INTRODUCTION

In this chapter, the results of the empirical study will be presented and discussed. Collis and Hussey (2003:297) state that in a phenomenological study it can be very difficult to separate the results from the analysis of the data. Ultimately, in a phenomenological as in a positivist study, the aim remains to make sense of the data.

According to Collis and Hussey (2003:300), the use of quotations, illustrations and individual episodes can assist in presenting complex qualitative data effectively. However, while diagrams or illustrations can be used for support and clarification, the main emphasis of the discussion must remain focused on the text.

In this chapter, the results of the stakeholder interviews will be presented in chronological order, in order to gradually build a picture of the data collected. In line with the quasijudicial method, the data will be methodically discussed to assist with the analysis that will follow in chapter 7.

6.2 SEMI-STRUCTURED INTERVIEW FINDINGS

As discussed in the previous chapter of this paper, semi-structured interviews were utilised to gather the primary data relating to stakeholder requirements. The questions posed to the participants are listed below:

- Describe the current relationship between your organisation/group and the other stakeholders in the local transport industry;
- What are your expectations with regard to the outcome of the integration process?
- In your view, how will the integration of the bus and taxi industries in Nelson Mandela Bay affect your stakeholder group?
- What, in your view, are the main challenges that stand in the way of the successful integration of the transport operators in Nelson Mandela Bay?

- What are your minimum requirements from the process?
- What suggestions (if any) do you have with regard to a preferred integration model? and
- What are the critical issues, from your point of view, that need to be addressed in the integration process?

The results of the interviews are presented below.

6.2.1 Interview – Eastern Cape Department of Roads and Transport

Together with the Nelson Manela Bay Municipality, the ECDRT was the primary driver behind the proposed integration process. It was therefore, particularly important to identify their requirements relating to a proposed integration model.

Interview summary

The ECDRT representative indicated that the Department of Transport expects the process to lead to the integration of the bus and taxi industries in the proposed contract area. This integration should be as inclusive as possible of the current operators in the affected area. His expectation is that a legal entity or entities should be created to represent the operators. The number of entities should be based on the business case and the most operationally viable solution.

Currently, the Department of Transport has an interim contract with Algoa Bus Company, whereby ABC is paid a monthly subsidy in order to provide a limited bus service on specific routes to the citizens of the Metropolitan area. The taxi operators currently receive no subsidisation from government. The involvement of the Department of Transport is limited to the issuing and control of operating licenses to individual taxi operators, which provides them with the legal right to transport commuters on individual routes within the city.

Under the new contract, the ECDRT will withdraw its current subsidy to ABC, and based on the new negotiated contract, provide a new, larger subsidy to the integrated entity. Since this entity will now include all transport operators, it will mean that both the former bus and taxi industries will benefit from government subsidisation, and by extension, so will all the commuters on the new system. This issue of equitable subsidisation is an extremely high priority of the government with respect to the integration process.

The uplifting and formalisation of the taxi industry is a key aim of the Department of Transport in this process. The taxi industry in its current format is ultimately unsustainable and operates to the detriment of taxi owners and drivers as well as to the detriment of the public that is dependent on the taxi industry for their daily transport needs. The need to integrate taxi operators into a scheduled transport service is therefore of paramount importance.

A major challenge to the project springs from the distrust between the taxi and bus operators. The required merging of the two industries will be made more difficult by the lack of co-operation between these two parties. Additionally, the differences within the fractured taxi industry itself will require a significant effort to resolve. Designing an entity structure that caters for the needs of all parties, while meeting the operational requirements of the Department of Transport, will be a challenging task.

Should a negotiated contract not be possible, the Department of Transport will revert back to an open-tender system. This would mean a winner-takes-all situation with losing bidders not getting any access to the contract.

The minimum requirements of the Department will be the following:

- The replacement of the interim contract with ABC with a negotiated contract signed with a new transport entity;
- Inclusion of the majority of the operators in the contract area through a jointly agreed solution;
- The creation of an entity structure that can integrate the bus and taxi industries in an operationally viable and mutually acceptable way; and

• A business plan which supports the above structure and specifies the size of the subsidy that will be required by the new entity.

Suggestions from the ECDRT representative included the following:

- The requirement for inclusion of current operators refers only to current legal operators. In other words, current taxi operators without a valid operating license do not need to be included in the new structure; and
- A thorough stakeholder consultation process should be followed to address the serious divisions that exist between operators in the transport industry.

Key requirements summarised:

- Integration of the bus and taxi industries;
- Equitable subsidisation for the bus and taxi industries;
- Inclusion of only taxi operators with valid, legal operating licenses;
- Formalisation of the taxi industry; and
- Skills transfer from bus to taxi industry.

6.2.2 Interview – Nelson Mandela Bay Municipality

The Transport Plan Project Manager represented the Nelson Mandela Bay Municipality in the study. The NMBM are the main drivers of the Broader Transport Initiative, of which the integration of the bus and taxi industries formed a sub-project.

Interview summary

The NMBM representative indicated that the integration of the bus and taxi operators was expected to be guided by the broader requirements of the Transport Project. A detailed overview of this project is provided in chapter 2 of this paper. Since the new transport system would be based on a trunk and feeder route system, it requires the integration and co-operation of the current bus and taxi operators for operational reasons.

The aim of the NMBM is to provide a transport service to the public that is efficient, safe and reliable and which can meet these standards on a sustainable basis. This is the primary requirement that needs to be met.

The original proposal by the NMBM was that five separate operating entities be established – one per geographical contract area in the new system. Each of the five contract areas will include both trunk and feeder routes. Trunk routes require bus services and feeder routes require mini and midi-bus services. Therefore, each entity will be required to provide both trunk and feeder services to the public, according to the demands of the system. In order to achieve this, each of the five entities would have to include former bus and taxi operators. The five separate contracts would need to provide seamless integration between the different areas as well as between the different modes of transport (taxis and buses). Ultimately, the Metro wants to see operating entities in place that can contractually be bound to provide the required and specified transport services to the citizens of the city. Currently the Metro has no relationship with the transport operators in the city, other than from a traffic law enforcement perspective.

The inclusion of the taxi industry is a necessary compromise from the Metro's perspective. The taxi industry does not provide any vital or irreplaceable contribution to the new system – whether from an asset or experience perspective – as the new service could hypothetically be provided in full by the current bus operators in the city. It would require a substantial expansion of the current scheduled services, but with sufficient financing the current bus operator has the operational and Human Resource capacity to meet the requirements of the new contract. However, from a practical and socio-political perspective, the inclusion of the taxi industry is imperative for the success of the new system. Exclusion of the taxi operators from the contract area would result in significant social resistance to the system. Additionally, it will not satisfy the requirements of national government, for whom the uplifting and formalisation of the taxi industry is a key priority.

The major challenges from the Metro's perspective is bridging the gap between the bus and taxi industry and marrying the social and operational requirements of the new system. In other words, while the social aspects of the problem cannot be ignored, the Metro ultimately requires an operationally viable company to sign the negotiated contract for the

provision of transport services. This company must therefore, be able to operate on a sustainable basis and meet the service requirements of the Municipal transport contract for the duration of the contract period.

If possible, the Metro would prefer to have a measure of competition built into the new system, in order to reduce dependence on a specific operator, as well as to serve as an incentive to provide high levels of service and performance. This is a difficult goal to achieve, since the system will rely on a single bus operator - ABC - for a substantial portion of the scheduled bus service assets, experience and infrastructure.

Key requirements summarised:

- Integration of bus and taxi industry;
- Establishment of viable operating transport entities;
- Negotiation and signing of five separate contracs to provide transport services to the city; and
- Existence of competition between operators in the new system.

6.2.3 Interview – Algoa Bus Company

Algoa Bus Company was represented by three members of their board of directors. They are:

- The Operations Director;
- The Financial Director; and
- The Chief Executive Officer.

Interview summary

Algoa Bus Company currently has an interim contract with the ECDRT to provide limited scheduled bus services to the citizens of Nelson Mandela Bay. ABC has no direct relationship with the NMBM, and is in a competitive relationship with the taxi industry, in that they operate on the same routes and compete for the same customers (commuters.) There is currently significant antagonism between ABC and the taxi industry. This is to

some extent fuelled by the taxi industry's grievance at the fact that ABC receives government subsidies to operate their bus services to the public.

ABC's expectations are based on a practical assessment of the situation. The proposed new transport contract for Nelson Mandela Bay will replace the current services being provided by both bus and taxi operators in the area. ABC's interim contract with the ECDRT will be replaced by a new negotiated contract between the NMBM and a new, integrated transport entity. Therefore, if ABC wishes to be part of this contract, they have to integrate with the other operators in the city. Ultimately, if no agreement can be reached, the negotiated contract will be concelled and an open tender approach will be followed instead.

ABC is confident that it can be competitive in its own right in responding to an open tender, but will prefer the negotiated tender route in the interest of meeting government goals in this regard. ABC is prepared to do this, but only if certain pre-conditions are met in the process. These are:

- The retention of the separate legal identity of ABC is a non-negotiable condition for their participation in the integration project;
- Entering the new structure on at least an equal footing with the taxi industry;
- Retaining the ability to exercise significant and effective management and operational control in the new structure;
- Having an operationally viable structure after integration; and
- Having a clear exit strategy which will allow ABC to withdraw from the integrated structure once the contract period comes to an end.

The new system will radically change ABC's environment and situation. The proposed integration with the taxi industry will require significant changes in their operating and management structure. The degree of change will depend on the type of structure selected. The contractual situation with the ECDRT will also change completely, since the current interim contract to ABC will be replaced by a new negotiated contract which will include the taxi industry as well.

ABC would prefer it if the bus and taxi industries could be retained as separate entities. A situation where the bus company serves the trunk routes and the taxi operators the feeder routes would be suitable from their perspective. In their view, the differences in operating structure, experience and history between the bus and taxi industries present significant challenges to the integration process.

Key requirements summarised:

- Retention of separate corporate identity:
- Exit strategy at the end of the contract period;
- Decision making authority within the integrated entity structure; and
- Security for current employees in order to ensure the retention of critical skills in the face of the change process.

6.2.4 Interview - Taxi industry

The taxi industry was represented by the chairpersons of the taxi associations in Port Elizbabeth. For confidentiality reasons, their names are not included in this paper.

Interview summary

The taxi industry consists of approximately 2000-2500 independent operators affiliated to 10 separate taxi associations.

The taxi operators expect to gain access to a major share of the bus industry through the integration project. They feel that they have historically been treated unfairly due to the fact that they carry approximately 70% of passengers in the area without receiving any subsidies from government. The taxi industry has therefore, needed to support itself while the bus operator has been receiving a subsidy from government for years. They do not want to be limited to feeder routes only in the new system, and are opposed to any idea which will limit them to feeder operations while giving the bus company exclusive access to trunk routes.

The taxi operators wish to become formal transport operators and expect government to provide the support to make this achieveable. The taxi industry also expects government to include as many of the current operators as possible in the new system. The actual preference is that ALL current operators be included, but that will depend on negotiations. The taxi industry further expects that operators will be compensated at least as much on a monthly basis under the new system, as they are currently earning. Current earnings of taxi operators vary from case to case.

The taxi industry is concerned about what will happen to employees who are not taxi owners, such as drivers. They should be provided for under the new system.

It is important that the issue of vehicles be addressed. The industry insists that their current vehicles should be purchased by the new integrated entity or entities, in order to relieve current owners of the burden of repaying installments on financed vehicles that will no longer be operating for them.

The taxi industry would want at least an equal share in any proposed integrated entity structure and would want to be able to be involved in the management and operational control of the new entities. The number of operating entities is not a concern to the taxi industry as long as they have significant ownership in all of them.

Key challenges from their perspective are the lack of cooperation between the bus and taxi industries, the lack of skills in the taxi industry, and the lack of capital available to buy into any proposed integrated structure. Skills development is therefore a high priority for the industry.

Key requirements summarised:

- Fair access to government subsidisation;
- Inclusion of as many taxi operators as possible;
- Access for taxi operators to become bus operators;
- Guaranteed monthly income for each taxi operator in excess of what they currently earn;

- Management involvement in new structure; and
- Transfer of skills to the taxi industry.

6.2.5 Interview – Port Elizabeth Private Bus Owners Association

Interview summary

PEPBOA is a smaller association of independent bus operators within the Metropolitan area. It is not represented by a separate legal entity. Instead, the individual owners run their operations independently.

PEPBOA does not possess any operating licenses. Instead, its members own permits, and conduct mostly long distance coach services. Therefore, they will not be required to relinquish any operating licenses to the new integrated operating structure.

PEPBOA has no affiliation with the other operators in the bus and taxi industry and do not receive any subsidies from government. However, the members of PEPBOA expect to receive their fair share out of the new system. They feel that they have been unfairly excluded from access to subsidies in the past, and see the new structure as an opportunity to correct this imbalance.

The members of PEPBOA are in favour of the new system, provided they share in the ownership of the new entity or entities. Thus, they are open to negotiations with the other operators, as long as their interests are protected.

Key requirements summarised:

- Fair access to government subsidisation; and
- Inclusion of all members of PEPBOA in the integrated transport entity.

6.3 INTERPRETATION OF RESULTS

The findings of the first round of interviews allowed the project team to develop a detailed picture of the key issues to be addressed from the point of view of each of the main parties involved in the integration project. In order to analyse the responses obtained from the interviewees, the key issues were extracted and summarised in a tabular format. The table of issues is provided below, together with the stakeholders who raised them.

Issue nr	Requirement description	Stakeholder
1	Integration of bus and taxi industry	ECDRT
2	Formalisation and uplifting of the taxi	ECDRT/Taxi Industry/NMBM
2	industry	
3	Inclusion of majority of transport	ECDRT/NMBM/Taxi
4	operators	Industry/PEPBOA
4	Transfer of skills from the bus to the taxi industry	ECDRT/Taxi Industry
5	Provision of a reliable, safe and efficient transport service to the public	NMBM/ECDRT
6	Retention of separate identity	ABC
7	Exit strategy at conclusion of contract	ABC
8	Competition within the system	NMBM
9	Fair distribution of routes	Taxi Industry
10	Fair access to subsidisation	Taxi Industry/PEPBOA
11	Acceptable shareholding and profit sharing	Taxi Industry/ABC/PEPBOA
12	Management and decision-making control in the new structure	ABC/Taxi Industry
13	Creation of five separate transport contracts – one per geographical area in the PTP	NMBM
14	Speed and ease of implementation	NMBM
15	Minimum reliance on subsidies	ECDRT/NMBM
16	Access to external financing	ECDRT/NMBM
17	Ease of termination at end of contract	ABC/NMBM
18	Phasing in implementation in separate contract areas	NMBM
19	Seamless, integrated system	NMBM
20	Long term sustainability	NMBM/ECDRT

(Source: The author)

The listed stakeholder requirements provided a framework of conditions upon which the new operating entity structure had to be constructed. The integration model that was

developed could only solve the main problem if it addressed these issues and was thereby ultimately acceptable to each of the participating stakeholder groups.

6.4 CONCLUSION

In this chapter the results of the interviews with the main stakeholders were presented and discussed. As per the quasi-judicial method, the results were analysed, and prima facie results arrived at. In the next chapter, the primary and secondary data gathered during the study will be integrated, and based on a detailed analysis of the results, a recommended solution to the main problem of the research study will be developed.

CHAPTER 7

DEVELOPMENT OF AN INTEGRATION MODEL

7.1 INTRODUCTION

The stakeholder interviews discussed in chapter 6 provided the data needed to generate the criteria which the new entity structure should adhere to. In this chapter, the data collected in the preceding chapters will be analysed in order to develop a number of entity structures for consideration. The options will be evaluated according to the quasi-judicial method of analysis and the most suitable option will be recommended. The presentation of this option to the transport stakeholders will be documented, and based on the feedback obtained, the final integration model for the operators in the transport industry will be developed.

7.2 DEVELOPMENT OF SCENARIOS

Based on an analysis of the stakeholder requirements, various integration options were developed as possible solutions to the main problem. Although six different options are discussed below, each can be categorised as a version of either a merger or a joint venture strategy as described by the literature study in chapter 3.

The two merger options listed below entail the combination of all existing entities into either a single new organisation or five smaller organisations (one per contract area). The four types of joint venture strategy listed below propose that the existing, separate identities of operators be retained, while a new joint venture entity, entities or contracts are created to fulfill the requirements of the new transport contract.

The justification behind each of these options is presented below.

7.2.1 One merger between the bus and taxi industries

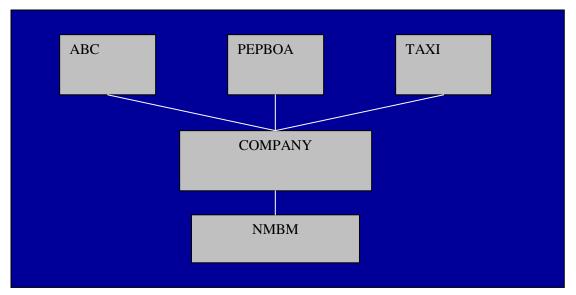


FIGURE 7.1 MERGER BETWEEN BUS AND TAXI INDUSTRIES

This was the most obvious option that presented itself based on the requirements of the ECDRT. A full merger between the bus companies and the taxi operators would achieve complete integration between the bus and taxi industries. The newly merged entity could then enter into five separate contracts – one per contract area – as required by the NMBM.

Characteristics:

- ABC, PEPBOA members and individual taxi associations merge into one newly formed company;
- ABC, PEPBOA members and taxi associations cease to exist as separate entities;
- The merged entity concludes five geographically based transport agreements with the NMBM; and
- The entire service is provided by the merged entity.

⁽Source: The author)

7.2.2 Five merged companies – one per contract area

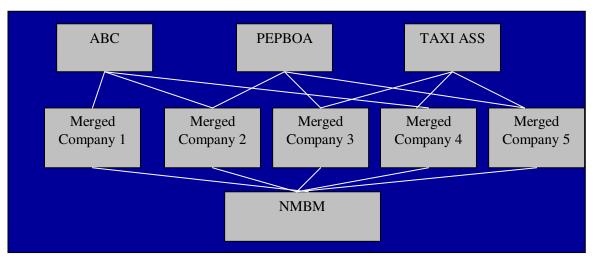


FIGURE 7.2 FIVE MERGED COMPANIES

(Source: The author)

The second alternative was to create a separate merged entity for each of the five contract areas. This would meet the integration criteria from government, while at the same time providing room for competition within the system, and thereby reducing the city's reliance on a single operator for the provision of public transport. In this scenario the taxi operators can be amalgamated into five groups while ABC is dissolved into five smaller bus entities. Each bus entity would then merge with one of the five taxi groups, to form a new, merged transport entity which can enter into one of the five contracts with the NMBM, corresponding to one of the five geographical areas in the overall system. This option, while possible, will be significantly more complicated, costly and time consuming than the single merger, as ABC would have to be divided into five separate, yet functional, smaller entities before the integration can take place.

Characteristics:

- ABC, PEPBOA members and the individual taxi associations merge into five separate, new companies;
- ABC, PEPBOA members and taxi associations cease to exist;
- The merged entities conclude five separate transport agreements with the NMBM– one per geographical area; and
- The entire service is provided by the merged entities.

7.2.3 One joint-venture company

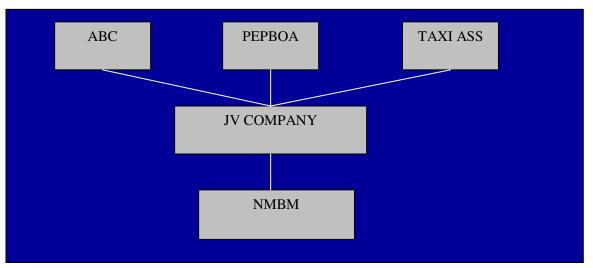


FIGURE 7.3 ONE JOINT VENTURE COMPANY

(Source: The author)

Despite the initial appeal of a merger, some of the stakeholder requirements would not be satisfied by this strategy. In particular, ABC raised two issues which cannot, at first glance, be adequately accommodated in a total merger between the two industries. The first is the requirement that they retain their separate identity after the integration process. This is problematic, since the basic premise of a merger, as defined in chapter 3, is the integration of two previously independent entities into a single, new company.

Secondly, ABC expressed their need for a sound exit strategy at the end of the initial contract period. They want the ability to withdraw from the integrated structure after the initial negotiated contract and pursue their own business interests should they wish to. Once again, a merger strategy would leave them with little room to extricate themselves from the new company at a later stage.

Based on these requirements, another integration strategy would have to be devised to cater to these requirements. As discussed in the literature study in chapter 3, a joint venture between ABC and the taxi industry would provide a suitable alternative to satisfy a need for retained independence and a separate identity. In this case, ABC and the taxi industry would be joint owners of a new entity, which could then contractually engage with the NMBM as required. In this way, each would retain their separate identities, while still providing an integrated entity to enter into the transport contracts with the NMBM. The joint venture company would then sign five, separate contracts with the NMBM, corresponding to each of the five geographical areas within the proposed system.

Characteristics:

- ABC, PEPBOA members and individual taxi association members retain their respective identities;
- The parties create a new legal entity for purposes of the envisaged public transport service, but also retain their individual identities;
- The new entity concludes five transport contracts with the NMBM to provide the entire service;
- Each of the parties will transfer or lease assets to the new company (e.g. vehicles, workshops etc.); and
- It is likely that the taxi industry might need to be formalised into a legal entity which will then become a shareholder in the joint venture company.

7.2.4 Five joint-venture companies – one per contract area

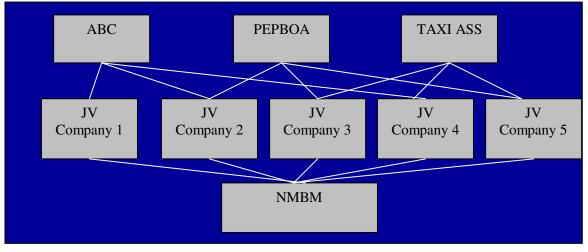


FIGURE 7.4 FIVE JOINT VENTURE COMPANIES

⁽Source: The author)

If a joint venture strategy was decided on, then, as in the case of a merger strategy, the option of five, separate joint venture companies – one per contract area – could be considered. However, an important distinction between this option and that of the five merged companies is that in this case, ABC will not need to be dissolved. Therefore, while the taxi operators would be split into five different groups, ABC would be a joint venture partner in each of the five joint venture companies. This meets the requirement of ABC to retain their current identity. However, this would defeat the purpose of achieving competition between the five operators, as approximately 50% of each of the companies would be owned by ABC.

Characteristics:

- ABC, PEPBOA members and individual taxi association members retain their respective identities;
- A maximum of five new companies are created (i.e. one for each of the proposed geographical areas) which will ultimately contract with the NMBM to provide the public transport service;
- The shareholders in a company will contribute assets to the new company (e.g. vehicles, workshops etc.);
- The shareholders of the companies will depend on the operational requirements of the particular geographical area;
- It might mean that an existing transport entity will be a shareholder in more than one of the new entities;
- The shareholders of the various companies could be individual operators, certain taxi associations or a single entity representing the entire taxi industry; and
- The less lucrative geographical areas could be grouped together thereby reducing the number of companies.

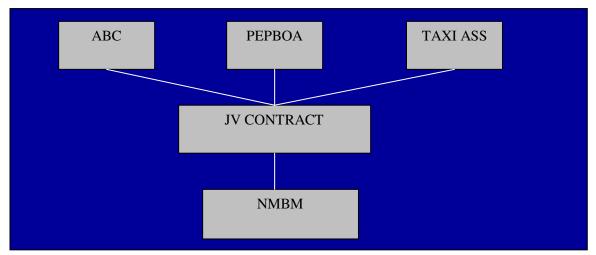


FIGURE 7.5 ONE JOINT VENTURE CONTRACT

(Source: The author)

As stated by Herzfeld (1990:35), in chapter 3 of this research study, the legal structure of a joint venture could be purely contractual in nature. In such a case, a joint venture entity is not created. Instead, a contractual agreement is simply entered into by the joint venture partners, focused specifically on responding to the requirements of the transport contract of the NMBM. This option would provide for full co-operation between the bus and taxi industry, without necessitating the creation of a separate legal entity that is jointly owned by the parties. It is the simplest and least challenging option, but it provides for a lower level of integration than the other options discussed thus far.

Characteristics:

- ABC, PEPBOA members and individual taxi association members (the parties) retain their respective identities;
- The parties conclude a joint venture agreement with each other to provide the service to the entire area;
- The joint venture agreement provides for the allocation of routes and services; use of assets; profit sharing etc.; and

• The parties in their respective capacities as joint venture partners conclude five separate service level agreements with the NMBM.

7.2.6 Five joint-venture contracts – one per contract area

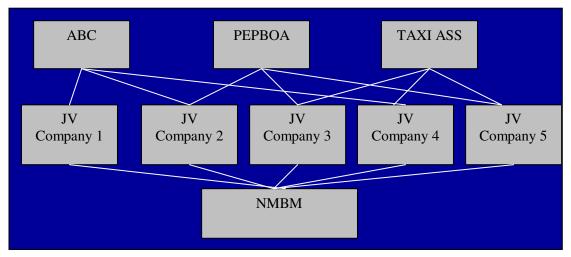


FIGURE 7.6 FIVE JOINT VENTURE CONTRACTS

As in the case of a merger and a joint venture company, the joint venture contract can also be divided into five, meaning that a separate contract would be signed between a group of taxi operators, ABC and PEPBOA for providing transport services in each of the five contract areas.

Characteristics:

- ABC, PEPBOA members and individual taxi association members (the parties) retain their respective identities;
- A maximum of five separate transport contracts are concluded;
- The parties to the various contracts will depend on the operational requirements within a specific geographical area;
- The parties have an opportunity to work together before creating a legal entity;
- It may mean that one or more of the existing public transport entities will be a party to more than one of the five contracts;

⁽Source: The author)

- The contract provides for the allocation of routes and services; use of assets; profit sharing etc.;
- The parties to the contracts conclude transport agreements with the NMBM; and
- The parties to the various contracts could be individual operators, certain taxi associations or a single entity representing the entire taxi industry.

7.3 SELECTION OF THE MOST SUITABLE OPTION

In order to make an informed decision between these strategies, the advantages and disadvantages of each option had to be analytically evaluated and compared. The following data served as inputs into the analysis:

- A review of relevant literature on integration strategies between organisations in general. This literature review was discussed in chapter 3; and
- A comparison of integration strategies based on the empirical data gathered in the case study. This includes the results of the stakeholder interviews discussed in the chapter 6 as well as the results of the study visit undertaken to Colombia, as discussed in chapter 4.

The results of the above research were analysed, and based on the outcomes a recommended integration strategy was selected.

7.3.1 Comparison of options based on literature study

As indicated in the conclusion of chapter 3, the results of the literature study revealed that a joint venture strategy was more suitable for the Nelson Mandela Bay case than a merger strategy.

7.3.2 Comparison of options based on primary data gathered

According to Collis and Hussey (2003:253), the analysis of qualitative data presents significant challenges to the researcher. Where possible, they suggest that the data be converted to a quantitative format, to assist in interpreting it. To facilitate this process, the

list of integration options were converted into a decision matrix populated with the key criteria generated by the stakeholder interview process presented in chapter 6. It is important to note that only the criteria that would be influenced by the choice of integration option were included in this exercise. Each option was then evaluated to determine the degree to which it satisfied each requirement, on a level of 1-5. In this way a quantitative score could be allocated to what was essentially qualitative data.

It should be pointed out that the awarding of scores was inherently a subjective process, as the score out of 5 was based on the opinion of the evaluating panel. However, this weakness was mitigated by the fact that the panel of evaluators consisted of the consulting project team that had intimate involvement in the entire stakeholder consultation process. These individuals possessed the required perspective of neutrality to judge the issues on their individual merit, and had the sole motive of selecting the best possible integration strategy to achieve the goals of the project. This was, after all, what they had been contracted for.

Not at all	0
Very low	1
Low	2
Medium	3
High	4
Very High	5

TABLE 7.1 SCORE ALLOCATIONS

In addition to the simple scoring system that was used, each of the criteria was also evaluated from a wider perspective. In this regard, the stakeholder requirements were divided between negotiable and non-negotiable issues. Non-negotiable criteria were issues of such importance that failure to address them would prevent any agreement between stakeholders from being reached. Therefore, meeting these requirements was considered to be mandatory. The remaining criteria were requirements that, if successfully addressed, would add weight to a specific option, but would not in isolation cause the agreement to fail if not addressed. This allowed the satisfaction of non-negotiable requirements to take precedence over less important issues, and thereby ensured that the decision-making process remained aligned with the reality of the situation on the ground. This aspect could not be addressed from a numerical scoring perspective, but was instead considered subsequent to the scoring exercise, when the issues were evaluated holistically and from an integrated project perspective.

The 20 criteria considered are listed below, together with a discussion of how well each of the integration options addressed each respective issue. As can be seen, the criteria are based on the findings of the stakeholder consultation process as documented in section 6.3.

Criterion 1: Integration of the existing operators

Analysis:

The merger options present the highest level of integration, with the previous identities of the participants being fully merged into and replaced by the new entity. The joint venture options do not take the integration to such a high level, but nevertheless, the creation of a new jointly owned company or companies will still ensure the full integration of the two industries on a practical level. The only difference will be the retention of separate identities for the participants. The joint venture contract options provide for the least degree of integration, as the integration will merely be on a contractual level, with no new entity being created which will integrate the operations of the participants.

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	5	4	4	1	1

Criterion 2: Formalisation and upliftment of the existing taxi industry

Analysis:

The single merger and single joint venture company options provide for the complete formalisation of the taxi industry. In these scenarios, the taxi industry becomes a full participant in a high profile, transport company that provides scheduled transport services to the residents of an entire city. Under the multiple merger and multiple joint venture company options, this is still achieved, if on a smaller scale. Furthermore, the smaller nature of the entities makes it more likely that some of the taxi operators may not form a viable operating entity, or not achieve sufficient skills transfer from the bus industry to adapt to the professional nature of the new system. This issue was touched on in the discussion on the best scenario for a full transfer of skills to the taxi industry. Under the joint venture contract options, the taxi industry will be left largely to their own devices, with only the minimum formalisation provided as per the requirement of the contract. The low level of integration with the bus industry will mean that they are designated largely to providing feeder services to the system, without getting significant access to the bus industry. As the bus portion of the fleet will gradually grow as the city grows, at the expense of minibuses, the taxi industry will be at a disadvantage in the long run, and the uplifting goals of the government will not be achieved.

TABLE 7.3 CRITERION 2 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	4	5	3	1	1

Criterion 3: Inclusion of the majority of the existing public transport operators

Analysis:

All of the options address this requirement fully.

TABLE 7.4 CRITERION 3 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	5	5	5	5	5

Criterion 4: Skills transfer between the transport operators

Analysis:

Essentially, this question is tied very closely to the level of integration that is achieved. The greater the integration, the greater the necessity for a transfer of skills from the bus to the taxi industry will be. It will be a business imperative, as the fortunes of both participants will be intricately tied together.

In both merger and joint venture entity options, a transfer of skills will be essential. In the case of the joint venture contracts, the bus and taxi industries will be less closely integrated, and less dependent on one another. While a transfer of skills is not discouraged by these options, there is less urgency for it to take place. Nevertheless, all of the options can be constructed to include a transfer of skills to some degree. The strong integration options simply address this issue more strongly. Additionally, the single merger and single joint venture company options have the added benefit of greater economies of scale, where the skills transfer costs can be shared across the entire firm, and thereby be conducted more efficiently and at a lower cost to the overall operation.

TABLE 7.5 CRITERION 4 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	4	5	4	2	1

Criterion 5: Efficiency at providing the envisaged service

Analysis:

The single merger and single joint venture options offer a high degree of efficiency in terms of performing the primary functions of the proposed operation. The ability to manage the entire service by way of a central management function greatly enhances the likely efficiency of the entity. In contrast, the options which require the use of multiple entities which operate at varying degrees of independence from one another are inherently less efficient in nature. In chapter 3, one of the key benefits of mergers was defined as the ability to reduce costs. The need for one management structure as opposed to five allows for the elimination of extensive duplication costs, and enables the smoother running of operations. The joint venture contract options allow for the least degree of efficiency, as no central planning function is provided for. Instead, the co-operation between the two partners will be purely on a contractual basis, with no merged management structure being created. The joint venture company option would entail the creation of an entirely new management structure for the new entity, and therefore retain the efficiency benefits associated with a full merger.

 TABLE 7.6 CRITERION 5 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	3	5	3	1	1

Criterion 6: Retention of the separate identities of the operators

Analysis:

This was a non-negotiable issue from the point of view of ABC. As stated already, the merger strategies are not able to meet this requirement at all. In contrast, the various forms of joint venture – whether it is via a new entity or simply on a contractual basis – allow for the complete satisfaction of this need. Each party to the joint venture will be able to operate additional, separate business activities, outside of the joint transport contract, while still meeting the integration requirements of the contract.

TABLE 7.7	CRITERION	6 SCORES
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Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	0	0	5	5	5	5

Criterion 7: Viable exit strategy for the partners at the end of the contract period

Analysis:

Once a merger has taken place, the previous identities of the participants no longer exist. For either party to extract their assets at some point in the future would be extremely complicated, and unlikely to be viable. The joint venture options make it quite simple for the participants to withdraw from the integrated structure after the completion of the transport contract. In the case of the five joint venture companies, this might be more difficult on the side of the taxi industry. If five separate taxi companies were originally created to enter into the five joint venture contracts, it may well be that upon withdrawing from the contract, some of these taxi companies will not be in a viable position to continue operations on their own. Therefore, the single joint venture company option would be more beneficial in this respect for all parties involved.

TABLE 7.8 CRITERION 7 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	0	0	5	4	5	5

Criterion 8: Competition within the local transport industry

Analysis:

The single merger, single joint venture company and single joint venture contract options provide no room for competition within the system, as all services will be provided by the same group of operators. The "five separate mergers" option provides for the greatest degree of competition, as each of the five contract areas will be serviced by a different, competing company. The Metro will therefore, be able to monitor and encourage competition between these companies to improve service levels as well as to reduce reliance on a single entity. In the case of five joint venture companies, the real level of competition is somewhat reduced, since each of the five companies will be partly owned by ABC. Nevertheless, the degree of competition will still be higher than in the cases where only a single new company is created. The same applies to the case of the five joint venture contracts, as ABC will be one party to the contract in all five cases.

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	0	5	0	3	0	3

TABLE 7.9 CRITERION 8 SCORES

Criterion 9: Equitable distribution of routes

Analysis:

The single merger and single joint venture options provide for a fully equitable distribution of routes by default, as all routes will be allocated to a single new entity, of which both participants are joint owners. In the case of the five merged or joint venture companies, this issue becomes more problematic, as the entities will each be allocated one of the five geographical areas in the transport contract, some of which may be more lucrative than others. In the case of the five joint venture companies, it would not affect ABC, as they would be joint owners of all five companies, but it would affect the respective taxi associations. This could lead to conflict and would be somewhat complicated to resolve. In the case of the contractual joint ventures options, the distribution of routes could be contractually divided, based on an agreement between the participants, although this would be a significantly more complicated goal to achieve equitably.

Furthermore, under the contractual joint venture options the taxi industry is more likely to be limited to operating on the feeder routes while the bus operators would service the trunk routes. Therefore, a key goal of the taxi industry – namely access to bus operations – would not be fulfilled in a joint venture contract situation.

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	2	5	3	2	1

TABLE 7.10 CRITERION 9 SCORES

Criterion 10: Equitable access to subsidisation

Analysis:

Equitable subsidisation would be achieved in exactly the same way as the division of routes. Therefore, the performance of each of the six options would be identical to that in the previous question.

TABLE 7.11 CRITERION 10 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	2	5	3	3	3

Criterion 11: Acceptable profit sharing mechanism

Analysis:

In all the options that entail the creation of a company or companies, distribution of profits will naturally be via the payment of dividends to shareholders. In the cases involving joint venture contracts, the remuneration of participants will be contractually agreed, based on the services and assets that each partner will be contributing to the contract. Therefore, all options score equally in this regard.

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	5	5	5	5	5

TABLE 7.12 CRITERION 11 SCORES

Criterion 12: Inclusion of the existing public transport operators at decision-making level

Analysis:

All five options addressed this requirement. However, the more centralised integration strategies provided a greater degree of management decision-making and control over the

entire operation than did the options that divided the system into multiple smaller operations. Nevertheless, none of the options were unable to meet the stakeholder requirements in this regard.

TABLE 7.13 CRITERION 12 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	4	5	4	4	4

Criterion 13: Creation of five separate contracts - one per geographical contract area

Analysis:

All of the options will meet this requirement.

TABLE 7.14 CRITERION 13 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	5	5	5	5	5

Criterion 14: Simplicity and speed of implementation

Analysis:

The joint venture contract options best meet this criterion. Contractual agreements will be less complicated and less time consuming to draw up than the creation of new companies, or the complete merging of independent operators. The joint venture companies will be the second-most favourable in this respect, as they do not entail the dissolution of the current organisational structure of ABC with that of the independent taxi operators. Finally, the full merger options would be the most difficult and time consuming activities to carry out, as a totally new company or companies would have to be created by integrating the current operations of the bus and taxi industries.

TABLE 7.15 CRITERION 14 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	1	1	3	2	5	5

Criterion 15: Self-sustainability and minimisation of reliance on Government subsidisation

Analysis:

The single merger and single joint venture company options would be more sustainable than the creation of multiple companies – either through mergers or joint ventures. The duplication of activities and structures in the latter cases will result in significantly higher costs which will have to be paid for through increased government subsidies. The joint venture contract options would be the least reliant on government subsidies, as no new structures or positions would have to be created, and very little integration would have to take place.

TABLE 7.16 CRITERION 15 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	2	1	3	2	5	4

Criterion 16: Promoting access to external funding

Analysis:

All things being equal, the single merger and joint venture company options would be more efficient and cost-effective than the creation of multiple companies. Coupled with the guaranteed contract for the provision of public transport for a fixed-term period, access to financing from banking institutions should be relatively easy to obtain. This probability would be greatly enhanced by the fact that the companies would be built around the core experience and track record of the ABC, with years of experience in operating as a formal bus company.

In contrast, the joint venture contract options would make it more difficulty for the taxi operators to obtain financing, as many operators have bad credit records, and they have no experience in managing large scale organisations.

TABLE 7.17 CRITERION 16 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	3	5	3	2	1

Criterion 17: Ease of termination at conclusion of contract period

Analysis:

The merger options would be very difficult to dissolve after the contract period comes to an end, as the former operators would be bound together in a newly integrated entity or entities with a single legal identity. The single joint venture company would be far simpler to terminate, as the dissolution of the joint venture company would be a simple matter of agreement between the participants. Theoretically, the same should hold true for the separate joint venture companies option. However, due to their smaller size, it may well be that the practical consequences of such a dissolution would be that some the taxi companies may not be able to continue operations independently. The dissolution of the joint venture companies may therefore not be as feasible from their perspective. The joint venture contract options would be the easiest to dissolve, since the contracts would simply be concluded when the time comes.

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	0	0	4	3	5	5

Criterion 18: Phased implementation of the new public transport system

Analysis:

All of the options considered would be able to allow for the phased implementation of the system on a geographical basis. In the single merger and single joint venture company scenarios, each new geographical area would merely be incorporated into the operations of the company as and when required. Since all operators were shareholders in the company, this would not present any problems. In the cases of five mergers and five joint venture companies, each respective company would simply become operational as and when the applicable geographical contract area became operational in the system. Under the contractual joint venture scenarios, the details of the phased implementation would merely have to be agreed between the contracting parties.

TABLE 7.19 CRITERION 18 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	5	5	5	5	5

Criterion 19: Seamless integrated public transport system

Analysis:

Although all six options will provide for a degree of integration, the single merger and single joint venture company options score highest in this regard. Under these options, the operations will be centrally managed as a single system, and all services will be provided by the same company. Under the geographically based options, each regional contract will be operated by a separate entity, and under the contractual options, even the geographical contracts will be operated by separate organisations who are merely co-operating under a contractual arrangement.

TABLE 7.20 CRITERION 19 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	5	3	5	3	2	1

Criterion 20 Overall viable, sustainable and profitable operation in the long run

Analysis:

The merger options present viability concerns, due to the lack of willingness of the major bus operator to fully merge its identity with the taxi industry. The joint venture contract options present sustainability concerns due to the fact that no new entity will be created. The operators will therefore remain divided and separated, with a minimum of skills transfer and joint decision-making taking place. The lack of a new entity will also hamper efforts to secure external funding from financiers. The option of creating five joint venture companies presents profitability concerns, as the duplication of functions in five separate companies would entail significantly higher costs. From a viability, sustainability and profitability perspective, the single joint venture company presents the highest likelihood of success.

TABLE 7.21 CRITERION 20 SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	1	1	4	1	1	1

7.3.3 Findings of the analytical exercise

The summarised results of the decision matrix are presented in the table below. The complete decision matrix, containing the full scoring exercise is included in Appendix D.

TABLE 7.22 TOTAL SCORES

Strategy	Merger	5 Mergers	JV	5 JV	JV	5 JV
			Company	Companies	Contract	Contracts
Score	69	58	88	70	64	62

Independent of the complete scoring exercise, a holistic assessment of the stakeholder requirements reveals that certain options do not adhere to the non-negotiable requirements raised by various stakeholders.

It was very clear from the interview with ABC that they would never accept any form of merger which would see them lose their individual identity. This viewpoint was bolstered by the findings of the literature study, which identified incompatibility of participants and differences in organisational culture as severe causes for concern when considering a merger strategy. Based on the conclusions from the literature study, a merger between two such different groups with a history of antagonism and distrust would be fraught with risk, and highly unlikely to succeed. Therefore, both merger options were effectively eliminated since they do not adhere to this requirement.

Similarly, the integration requirements of government meant that a simple contractual joint venture between the bus and taxi industries was unlikely to lead to the level of integration and skills transfer that is one of the highest priorities of the ECDRT and the NMBM in this exercise. Furthermore, such a contractual arrangement would effectively limit each party to their current sphere of operations, as no new entity structure would be created to up-skill the taxi industry into becoming bus operators. This meant that a key requirement of the taxi industry – namely that they do not wish to be limited to being minibus operators only – would not be met by this option.

The above factors meant that only the joint venture company options remained as viable solutions. The decision between a single joint venture entity and five separate joint venture entities was resolved by the practical and cost related requirements of the case study. The duplication of costs that would result from the creation of multiple joint venture entities, coupled with the reduced level of integration and central planning that this would bring

about, ultimately outweighed the valid concerns surrounding the lack of competition in the system. Furthermore, given the fact that ABC would be joint owners in each of the proposed five joint venture entities in any case, the five entities option would not significantly increase the level of competition that would exist in reality.

In the end, the fact that the single joint venture entity option achieved the highest overall score on the decision matrix was merely a reflection of the practical and logical requirements of the situation. The winning score served as a supporting factor in the selection of this option, which is ultimately superior due to the fact that it meets the key non-negotiable requirements that are integral to achieving stakeholder buy-in into the process.

7.4 FEEDBACK FROM THE FOCUS GROUP

As required by the quasi-judicial data analysis methodology, it is necessary to review the method by which the above solution was arrived at from a logical and factual perspective before proceeding further. In order to ensure that this model truly meets the requirements as stated by the stakeholders, it was necessary to obtain a second round of input from stakeholders, based on the interim recommendation that had been arrived at.

In March 2008, the proposed entity structure was presented to the key stakeholders for commentary. The results of this focus group session were as follows:

7.4.1 ECDRT

The ECDRT representative accepted the proposed structure, while adding the following comments:

• He was still in favour of a full merger, but was willing to accept the joint venture as a compromise solution; and

• He required a detailed financial plan in order to see the subsidy that will be required by the new system.

7.4.2 NMBM

The NMBM representatives accepted the proposal, based on the following conditions:

- That five separate contracts one for each geographical area still be signed with the joint venture entity;
- That the financial implications of the structure be presented by way of a detailed financial plan, detailing the required subsidy that will be necessary to support the system;
- That the operators find the structure acceptable;
- They were somewhat concerned about the lack of competition in the proposed structure, but were willing to accept it in exchange for greater cost-efficiency; and
- That methods of obtaining financing for the new entity (loan finance from banking institutions) be explored.

7.4.3 ABC

The proposed structure was deemed acceptable in principle, with the following conditions:

- That the shareholding percentage distribution be resolved;
- That the management structure of the new entity be clearly defined;
- That a clear decision-making mechanism be created at board level to avoid deadlocks and ensure efficient and smooth decision-making by the directors of the company; and
- That the distribution of profits be clearly defined.

7.4.4 Taxi industry

The representatives of the taxi industry expressed cautious acceptance of the proposed structure, based on the following conditions:

• That the shareholding percentage distribution be resolved;

- That the taxi industry is assisted in creating a taxi company to represent them in the joint venture entity, as depicted in the diagram;
- That the financial implications of the proposed structure for each operator be calculated. Only if operators were better off under the proposed model, would the taxi industry be in favour of the proposed entity structure;
- That skills transfer to the taxi operators take place;
- That the entry requirements for operators into the joint venture be clearly defined;
- That the distribution of profits be clearly defined; and
- That the issue of transferability of shares be explored and defined.

7.4.5 Results from the focus group exercise

Based on the positive results from the focus group exercise, the proposed model could be provisionally accepted. With an acceptable framework for the proposed solution in place, the next step would entail addressing the detailed requirements of the new entity structure. This would be based on the feedback obtained from the stakeholder focus group as presented above. While a final solution to all of these issues will not be reached without a new, extensive negotiation process, the key principles underlying this solution will now be discussed below.

7.5 DEVELOPMENT OF A DETAILED FRAMEWORK BASED ON THE FOCUS GROUP'S REQUIREMENTS

7.5.1 Entry requirements and eligibility to own shares

As per the requirements of the Department of Transport documented in chapter 6, participation in the joint venture will be limited to legal taxi operators with valid operating licenses for routes within the geographic area of the new contract. Taxi operators will be required to give up their current operating licenses in order to become part of the new joint venture. In exchange for a legal operating license, a taxi operator would be eligible for a single share in the new taxi entity (Taxi Co). Operators with more than one valid operating

license will be eligible for one share for each operating license. In this way, the operators with larger operations under the old system would gain a correspondingly larger share in the new business as well. This is considered to be a fair system, since the relinquishment of their original operating licenses would require them to give up a larger source of income than a comparatively smaller operator who might have only a single operating license.

On the side of the bus industry, only the Algoa Bus Company and PEPBOA would be eligible for shareholding in the joint venture company. Shareholding in Bus Co would have to be resolved through negotiations between the two parties, but with comparative operational size as a starting point, the proportion would be approximately 90-10 in favour of the Algoa Bus Company.

7.5.2 Financial model

In order to achieve buy-in from the respective parties, the financial implications of the new joint venture entity for each of the stakeholders had to be demonstrated. To do so, the financial model for the new entity had to be developed. As explained by Edgar Sandoval in his presentation in chapter 4, it was the business model that ultimately convinced the transport operators in Bogota, Colombia, to participate in the new transport companies. The development of the business model was therefore an integral part of the integration process.

It should be noted that the development of the financial model for the new entity constituted a substantial project in its own right, and falls outside the scope of this study. However, the results of the financial model did impact the acceptability of the joint venture structure, and the integration of the transport industry as a whole, insofar as it was the single biggest issue of concern to the taxi operators prior to their acceptance of the proposed structure. For the purposes of this study, it is necessary to note that the proposed earnings per individual taxi operator, as defined in the financial plan, was of sufficient value to convince the majority of taxi operators that they would be financially better off as participants in the integrated joint venture model, than they had previously been when working as individual taxi operators.

7.5.3 Joint venture shareholders agreement

According to Herzfeld (1990:40), the basic shareholders agreement is the foundation of the joint venture entity. The level of detail required will vary from case to case, but a number of general issues are identified which should be addressed in the standard shareholders agreement of most joint venture companies. According to Herzfeld (1990:42), citing Gavin (1980), the more thoroughly each topic is addressed in the initial agreement between shareholders and the new entity, the less likely will be future disagreements and unexpected risks.

The most important point that should be included in all such agreements is the definition of the business of the proposed joint venture. This becomes particularly important when one or more of the participants are already engaged in the kind of business that the joint venture will be conducting, since they will be able to affect the level of competition to which the new joint venture will be subjected to (Herzfeld, 1990:42). In the case of Nelson Mandela Bay, this is of particular relevance, as both partners are historical operators in the industry that the joint venture will operate in.

In addition to this issue, the basic shareholders' agreement addresses a number of the key elements identified as issues requiring resolution in the focus group exercise. These are addressed below.

7.5.4 Capital structure and method of subscription

Shareholding in a joint venture fulfills the same role as in any other limited liability company. In certain situations however, it would be preferable to locate different classes of shares to the two or more parties to a joint venture. This provides for a situation where the share in the voting or controlling rights in the joint venture can be separated from the share in the profits. This means, for example, that a 60% to 40% profit sharing could exist, while control of the entity is shared equally between the two participants (Herzfeld, 1990:43).

This is an issue of particular relevance to the Nelson Mandela Bay case. Separating control from relative shareholding will address the key issue of decision-making control as expressed during negotiations between the bus and taxi industry to date.

7.5.5 Transferability of shares

The transferability of shares presents unusual complications to a joint venture. Should participants be free to dispose of their shares to outsiders, it could result in incompatible parties being forced into working together to the detriment of the joint venture. Therefore, it is usual for joint ventures to either prohibit the transfer of shares by participants or to impose some sort of time delay on any such transfer. If this is not legally possible, existing shareholders are often given a pre-emptive right of first purchase in order to avoid unwanted outsiders from entering into the venture. However, in such cases, determining a suitable market value for the shares can be difficult, and the price at which such a pre-emptive right can be exercised is often a point of contention. Herzfeld suggests that in such a case the pre-emptive right should either be exercised at a bona-fide price offered by an outsider, or at a price determined by an independent valuation (Herzfeld, 1990:44).

7.5.6 Minority protection

Where the shareholdings of the two parties are unequal, and where more than two parties are involved, minority protection is an important matter for agreement. According to Herzfeld, (1990:45), the simplest way to achieve this is to require unanimity, or a suitably qualified majority, for resolutions at shareholders and directors meetings. Should even more minority protection be required, a list of topics requiring a positive resolution by directors or shareholders can be stipulated in the shareholders agreement, so that management cannot make decisions on the listed topics without obtaining a unanimous or suitable majority decision from the board or the shareholders.

According to Herzfeld(1990:45), a list requiring unanimity might include the following matters:

- Changes in the share structure of the company;
- Approval for capital expenditure and asset disposals beyond pre-agreed limits;
- Increases in the borrowing limits of the company;

- Acquisition, disposal and winding up of the business;
- Major changes in the nature of the company's business;
- Appointment or dismissal of key personnel; and
- Major litigation.

The above list merely serves as an example, and more items can be added as deemed necessary in the particular joint venture situation. The purpose of the list remains the protection of minority partners in the joint venture.

In the case of Nelson Mandela Bay, this issue is relevant insofar as the smaller bus operators (PEPBOA) need to be accommodated into the integrated entity. Due to their relative size, they will be a very small minority in the proposed new entity, and minority protection will therefore be a high priority to them. However, this issue in itself creates the environment conducive to the creation of deadlocks, which is addressed as a separate point below.

7.5.7 Deadlock

Protecting the interests of minorities in a partnership is necessary in order to arrive at a mutually beneficial agreement in the first place. However, the mere fact that some decisions in the new joint venture will need minority co-operation in order to be executed by its very nature weakens the speed and efficiency of the decision-making process.

Herzfeld (1995:47) describes it as follows:

"Evidently, the more matters that are required to be addressed on the basis of unanimity, the greater the risk that the venture will experience a conflict which cannot be resolved and which, if serious enough, will produce deadlock."

In the business environment, deadlocks in the decision-making process can have serious consequences for the competitiveness of the firm, and even threaten its continued ability to operate (Herzfeld, 1995:47).

Herzfeld (1995:48) recommends that the shareholders' agreement makes provision for the eventuality of a deadlock, and provides alternatives for the resolution thereof in advance. Examples of possible solutions to the problem include giving a casting vote to the chairman of the board of directors or to submit the dispute to arbitration. However, both of these options have disadvantages. By awarding a casting vote to an individual, the party to which that person is affiliated will naturally be able to dominate the decision-making process. On the other hand, by submitting the dispute to arbitration, the venture is placed at the mercy of individuals who might not have sufficient knowledge about the industry in which the company operates to make the correct business decision with regard to the deadlock situation.

An alternative to the above is to provide a so-called "swing-vote" capacity to an additional director or small shareholder, who will be able to break any potential deadlock with his vote. However, this effectively places this party in the position of so-called "kingmaker", and upsets the balance of power within the venture. Additionally, the resolution of a deadlock to the dissatisfaction of any of the parties, will merely lead to the creation of more deadlocks by this party as their unhappiness with the situation grows (Herzfeld, 1995:48).

The issue of deadlock remains a challenging one and is of particular significance for the Nelson Mandela Bay Transport integration. Where possible the potential deadlock situations should be provided for in the original shareholder's agreement. However, the potential for deadlocks will remain and in those situations the options described above will need to be evaluated on a case-by-case basis.

The final option for the resolution of an unbreakable deadlock remains the dissolution of the joint venture. Should it be required, it can either result in one party buying out the shares of the other dissatisfied party, or simply the ending of operations and the closing down of the venture altogether (Herzfeld, 1995:48). This is a result that should be avoided if at all possible.

The issue of deadlock is the major reason why a purely 50/50 split in shareholding between the two major partners is unlikely to be suitable in the case of Nelson Mandela Bay.

7.5.8 Composition of board and management

Since the day-to-day control of the joint venture will be in the hands of the directors of the new corporation, the composition of the board is of great significance to the participants. Whoever has control of the board will have control of the joint venture. Therefore, the manner in which directors are appointed to the board is one of the most important issues that need to be addressed in the joint venture agreement. Since the shareholders usually elect the directors, the agreement will have to stipulate the number of directors that can be appointed from each party. Of course, if the shareholding is not split equally, this will mean that one party will be able to dominate the other on the board of directors of the new entity.

Herzfeld (1990:50) suggests that a way to overcome this is to allocate different classes of shares to different participants. Key issues that need to be addressed in the agreement are the quorum required as well as the requirements of either unanimity or qualified majorities. The board chairman – if required – can be appointed on a rotating basis in order to balance the power between the two parties. The chairman need not be allocated a casting vote, especially if control of the board is precisely balanced between the participants.

Irrespective of the composition of the board, the parties will usually want to stipulate in advance how the new entity will be managed, as well as how the chief executive officer will be appointed. Where one of the parties is able to dominate the joint venture due to a larger equity investment and consequent portion of the shareholding, it is even more important for the management structure to be agreed upon in advance (Herzfeld, 1990:51).

The composition of the board will be one of the key issues to be resolved when considering a joint venture between the bus and taxi industries in Nelson Mandela Bay. Ultimately, a board needs to be created which can manage the new venture efficiently and ensure the sustainability of the new operation. Indecision, deadlocks or political interference in the business decisions at board level are a significant business risk and need to be avoided as a matter of priority. The composition of the board therefore, needs to be negotiated and resolved between the parties before a joint venture is embarked upon. A strong, decisive and competent board of directors will be a key requirement if the joint venture is to meet its goals successfully.

7.5.9 Methods of financing

In order to establish a new joint venture entity, financing will be required. The source of these funds can either be capital contributions from one or more of the participants or borrowings obtained by the joint venture company (Herzfeld, 1990:55). The costs of financing such loans need to be taken into account when the financial forecasts for the new entity are conducted.

Although this is a key part of the Nelson Mandela Bay integration project, a detailed examination of the financing solutions falls outside the scope of this paper. However, it is important that issues that would affect the likelihood of obtaining financing are considered during the integration process. According to Mr. Graham Smith, from HSBC, the management and shareholding structure of the company will be of crucial importance when the banks or financing institutions evaluate the risk of providing loans to the company. The ability to make clear decisions based on what's best for the profitability of the business must be enshrined in the shareholders agreement. To the extent that this influences the integration strategy, it needs to be a priority during the integration process (Graham Smith, HSBC, National Transport Conference, Pretoria, 2008).

7.5.10 Distribution of profits

Repatriation of funds normally occurs via the payment of dividends to shareholders. If no party has the majority of shares in the joint venture, the payment of dividends out of available profits cannot be enforced by any one of the participants. In order to overcome this constraint, Herzfeld (1990:51) suggests that it is advisable to establish the dividend payout ratio in advance. This can be achieved by including a clause in the shareholders agreement that stipulates a fixed percentage of distributable profits to be paid out as a dividend to shareholders. Should any one party then vote against the dividend payout at any time, for whatever reason, they would be in breach of the shareholders agreement. Such a provision ensures that both parties can have guaranteed access to their share of the profits, provided that the joint venture has made sufficient profit to distribute to the shareholders.

This issue is very important in the case of Nelson Mandela Bay. As identified in the review of stakeholder requirements, the taxi operators will require guaranteed access to regular dividends to replace the cash they currently collect from their passengers on a daily basis. Without regular dividends, they will be left without income and would therefore be highly resistant to entering into any negotiated joint venture agreement with the bus industry. Setting out the distribution of income to the shareholders in the initial shareholders agreement will therefore be a non-negotiable requirement in this case.

7.6 CONCLUDING REMARKS

In this chapter, all of the data gathered during the research study was combined and analysed in order to arrive at an integration model that could meet all of the key requirements of the case. After a rigorous process of logical, step by step decision-making, a final recommendation was arrived at. The answers to each of the sub-problems posed at the start of this case study were considered and used as references and inputs into this process. The resultant recommendation was presented to the stakeholders, for feedback and commentary. The result of this consultation process, was that the integration model was provisionally accepted, based on various conditions. In response to the stakeholder feedback, the detailed requirements of the conceptual model could be developed, based on a study of relevant literature. With the details added to the framework, a complete conceptual model was devised, and guidelines developed for its implementation.

The end result presents a definitive and unambiguous answer to the main problem statement of this research study. In the next and final chapter of this study, the overall conclusion will be presented, together with recommendations for future research that could be conducted to resolve questions that remain unanswered, or require further clarification subsequent to the completion of this study.

CHAPTER 8

CONCLUSION

This research study has sought to address the problem of integrating the bus and taxi industries in Nelson Mandela Bay into a viable entity structure for the provision of public transport to the city. In response to this problem, data was gathered from a wide range of sources in order to develop a framework for the creation of a suitable integration model.

8.1 RECOMMENDED INTEGRATION MODEL

The primary data gathering exercise, as documented in chapter 6, provided a comprehensive list of stakeholder requirements which the ultimate solution had to adhere to. The analysis of this data in chapter 7 allowed for the identification of the most appropriate integration model – namely the creation of a single joint venture company between the bus and taxi operators.

The results of the data analysis exercise were supported by the findings of the literature study in chapter 3, which concluded that a joint venture strategy was more suitable than a merger strategy. Specifically, the literature study indicated that a joint venture strategy was more suitable for the following key reasons:

- Joint ventures are often entered into for the purposes of a specific contract, as in the Nelson Mandela Bay case, whereas mergers are permanent arrangements;
- Joint ventures are more suitable when substantial differences exist in the organisational cultures of the participants;
- Joint ventures allow both partners to retain their existing identities, and therefore provide for a viable way in which the partnership can be ended, if necessary; and
- Joint ventures allow for a trial period of cooperation for organisations who are unsure whether they are ready for a full merger.

The key finding from the study visit to Bogota and Pereira, as documented in chapter 4, was that in addition to meeting the primary stakeholder requirements, the structure of the joint venture company must also make possible the operation of a viable and sustainable

business. Therefore, in order to define the structure and characteristics of the proposed joint venture company more clearly, the primary data gathered from the stakeholders had to be integrated with the secondary data from the literature study, as well as the observations from the study visits to Bogota and Pereira.

In chapter 3, the key requirements that needed to be addressed in the creation of a joint venture were discussed. Chief of these was that a joint venture should be a partnership of equals. This was also reflected in the study of stakeholder requirements in chapter 6, where both the bus and taxi industries indicated that they did not wish to be dominated by the other party in the partnership. Therefore, the starting point in the creation of the proposed company structure was that the bus and taxi industry needed to be equal partners in the proposed venture.

In order for the taxi industry to be on an equal footing to their joint venture partners, it was necessary to incorporate the independent taxi operators into a unified entity. To achieve this, a new company would have to be created to represent all participating taxi operators. Instead of being individual businessmen, the taxi operators will now become shareholders in a jointly owned company. For the purposes of this paper, this company is referred to as Taxi Co. On the side of the bus industry Bus Co would be established to represent the Algoa Bus Company and the smaller PEPBOA.

The newly established Bus Co and Taxi Co would then be joint shareholders in the proposed joint venture company. The joint venture company will sign five separate contracts with the NMBM to provide public transport to the city. The proposed structure is depicted in the diagram below. Additional diagrammatical presentations of the structural relationship between the parties are included in Appendix E.

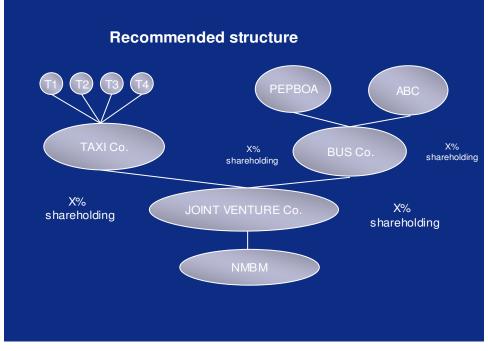


FIGURE 8.1 RECOMMENDED ENTITY STRUCTURE

Source: The author

The key characteristics of the recommended structure are as follows:

- Algoa Bus Company (ABC) and PEPBOA will purchase shares in a new transport company (Bus Co);
- The existing individual taxi operators will purchase shares in a new transport company (Taxi Co). The qualification requirements for shares will be the ownership of a valid operating license;
- Bus Co and Taxi Co will then purchase shares in the joint venture company (JV Co);
- The Board of Directors of the joint venture company should be comprised of an agreed upon number of representatives from Bus Co and Taxi Co, but should predominantly be comprised of qualified and experienced professionals;
- The joint venture company will conclude five separate transport contracts with the NMBM, one per geographical area, to provide a public transport service to the city. According to this contract, the joint venture company will be paid per kilometer traveled, instead of per passenger carried. This is a key lesson learned from the

models in Colombia, and will remove the incentive for overcrowding of vehicles by the operators;

- PEPBOA and ABC can either lease or sell their existing vehicles, workshops and other assets to Bus Co or directly to the joint venture company;
- Similarly, PEPBOA and ABC can second staff to the joint venture company; and
- The existing taxi operators will also have the option of leasing or selling their vehicles to either Taxi Co or directly to the joint venture company. The benefit of selling the vehicles to Taxi Co is that this company is then in a strong position to tender for work independently after the initial contract period and the need for the joint venture company expires.

In terms of the minimum criteria generated by the stakeholder interviews, the suggested integration model successfully provides for the following key requirements;

- Formalisation of the taxi industry;
- Integration of, and skills transfer between the existing public transport operators;
- Equitable ownership and division of profits;
- Involvement of existing transport operators in key decision-making;
- Ability to address a phased implementation of the new transport system;
- Retention of the identities of the existing operators allowing for their independent development and competition after the initial contract period;
- An efficient exit mechanism for shareholders at the end of the initial contract period;
- Promotes an integrated service; and
- Legal entity therefore limited liability.

The literature study provided clear guidelines on how the integration process should be conducted subsequent to the selection of a suitable integration model. The building of trust during the inter-organisational negotiations, strong leadership from management, and open and honest communication with employees and stakeholders within all participating organisations emerged as key contributors to a joint venture's success.

8.2 AREAS FOR FUTURE RESEARCH

The selection of an integration strategy and the development of a structural model to integrate the transport operators into a unified entity have been completed. A joint venture company was selected as the most appropriate integration model given the unique requirements of the situation. The method by which this was achieved was documented and the results presented. However, the negotiations surrounding the physical integration of the participating entities are still underway. This process would be well served by the application of the lessons learned from the literature study, in chapter 3. The five steps provided by Harris Helmer (2002:1) for achieving successful joint venture integration, are:

- Preparing leadership to manage change;
- Dealing with the impact of change;
- Communicating the change;
- Working with the survivors of change; and
- Protecting the business from change.

Each of these factors have been encountered to a greater or lesser extent during the stakeholder discussions to date, and each will remain a challenge that will have to be effectively overcome if a successful joint venture firm is to be created. The documenting of this process, and a full analysis of the results thereof, will be a worthwhile subject for a future research study.

8.3 PROBLEMS AND LIMITATIONS OF THE RESEARCH

The major problem encountered during the research process was the pioneering nature of the study. Similar studies in a South African context did not exist and could therefore not serve as points of reference. Furthermore, while comparative studies in other countries provided useful data in some respects, the unique socio-economic environment in South Africa presented different challenges from those faced in regions such as South America. To compensate for this shortcoming, significant reliance was placed on obtaining an indepth understanding of the specific requirements of the stakeholders, in order to develop an appropriate solution to the main problem.

Due to the strong focus on the relevant stakeholder needs, the recommended integration model is highly specific to the situation in Nelson Mandela Bay. While the lessons learned in terms of the *process* that was followed can be of great value to similar projects elsewhere, caution should be exercised when gauging the model's suitability for application in other scenarios. Stakeholder needs will differ on a case by case basis, and the resultant solution will change accordingly. The true worth of the study is that it serves as an example of how a transport integration problem might be approached, and demonstrates a *process* by which a potential solution could be developed.

8.4 CONCLUDING REMARKS

In the introduction to chapter 1, the statement was made that the goal of this research study is the achievement of mutually beneficial solutions for the integration of competing parties in an environment of change and uncertainty. After an exhaustive research process, an extensive analytical exercise, and the critical evaluation of the scenarios generated, a solution to this challenge has been proposed. The result has been the development of a groundbreaking integration model for the bus and taxi industries in Nelson Mandela Bay. If successfully implemented, this model would set an example for other cities in South Africa to follow. From this perspective, this research study is therefore a valuable addition to the existing body of knowledge and extremely relevant, given current and future transport developments in South Africa and internationally.

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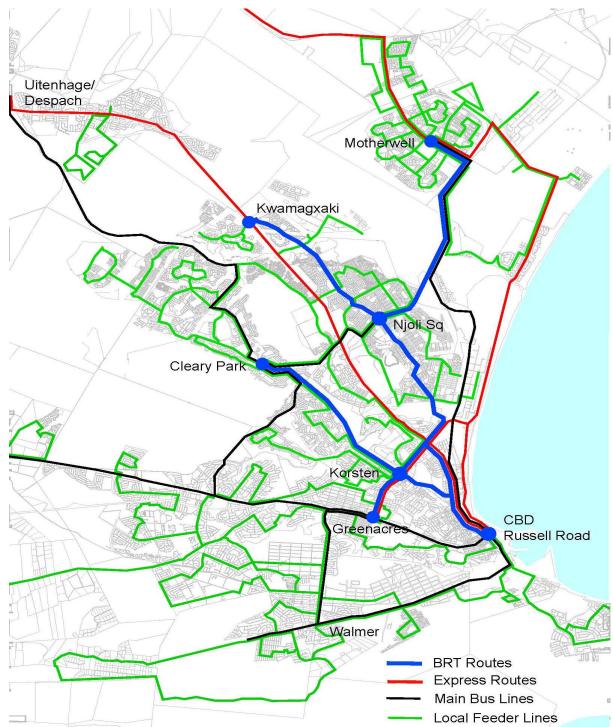
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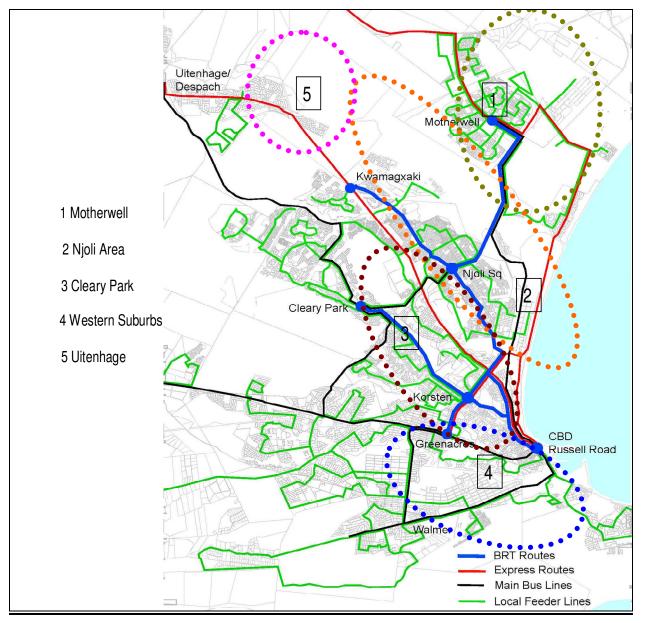
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APPENDIX A



MAP OF NELSON MANDELA BAY MUNICIPAL AREA

APPENDIX B



MAP OF THE PROPOSED CONTRACT AREAS

APPENDIX C

SEMI-STRUCTURED INTERVIEW FRAMEWORK

The questions below served to guide the semi-structured interviews towards the most important issues that needed to be addressed by the proposed integration model. Therefore, the interviews did not take place on a rigid, predetermined basis, but corresponded to the semi-structured interview format as indicated by Collis and Hussey in chapter 5. As long as the content of the interview covered the areas in question, whether via the general discussion or prompted by a specific question, the goal of the interview was considered to be achieved.

Question 1

Describe the current relationship between your organisation/group and the other stakeholders in the local transport industry.

Question 2

What are your expectations with regard to the outcome of the integration process?

Question 3

In your view, how will the integration of the bus and taxi industries in Nelson Mandela Bay affect your stakeholder group?

Question 4

What, in your view, are the main challenges that stand in the way of the successful integration of the transport operators in Nelson Mandela Bay?

Question 5

What are your minimum requirements from the process?

Question 6

What suggestions (if any) do you have with regard to a preferred integration model?

Question 7

What are the critical issues, from your point of view, that need to be addressed in the integration process?

APPENDIX D

INTEGRATED DECISION MATRIX

List of Criteria						
Criterion	Criterion Description					
Number						
1	Integration of bus and taxi industry					
2	Formalisation and uplifting of the taxi industry					
3	Inclusion of majority of transport operators					
4	Transfer of skills from the bus to the taxi industry					
5	Provision of a reliable, safe and efficient transport service to the public					
6	Retention of separate identity					
7	Exit strategy at conclusion of contract					
8	Competition within the system					
9	Fair distribution of routes					
10	Fair access to subsidisation					
11	Acceptable shareholding and profit sharing					
12	Management and decision-making control in the new structure					
13	Creation of five separate transport contracts – one per geographical area in the PTP					
14	Speed and ease of implementation					
15	Minimum reliance on subsidies					
16	Access to external financing					
17	Ease of termination at end of contract					
18	Phasing in implementation in separate contract areas					
19	Seamless, integrated system					
20	Long term sustainability					

Criterion number	Score: Merger	Score: Five Mergers	Score: JV Company	Score: 5 JV Companies	Score: JV Contract	Score: 5 JV Contracts
1	5	5	4	4	1	1
2	5	4	5	3	1	1
3	5	5	5	5	5	5
4	5	4	5	4	2	1
5	5	3	5	3	1	1
6	0	0	5	5	5	5
7	0	0	5	4	5	5
8	0	5	0	3	0	3
9	5	2	5	3	2	1
10	5	2	5	3	3	3
11	5	5	5	5	5	5
12	5	4	5	4	4	4
13	5	5	5	5	5	5
14	1	1	3	2	5	5
15	2	1	3	2	5	4
16	5	3	5	3	2	1
17	0	0	4	3	5	5
18	5	5	5	5	5	5
19	5	3	5	3	2	1
20	1	1	4	1	1	1
Total	69	58	88	70	64	62

Integrated Decision Matrix

APPENDIX E

RECOMMENDED INTEGRATION MODEL

