

**PERCEIVED SERVICE QUALITY:  
THE CASE OF MATATU INDUSTRY**

**BY**

**MWAURA ANTHONY KAIRU**

**UNIVERSITY OF NAIROBI  
LOWER KABETE LIBRARY**

**A MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL  
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE IN  
MASTER OF BUSINESS ADMINISTRATION (MBA), FACULTY OF COMMERCE,  
UNIVERSITY OF NAIROBI**

**SEPTEMBER, 2002**

# DECLARATION

This Management Research Project is my original work and has not been submitted for a degree in any other University.


Signed..........

Date...17.10.2002.....

**MWAURA A.K.**

This management research project has been submitted for examination with my approval as

University Supervisor.

Signed..........

Date...17-10-2002.....

**MARGARET OMBOK**

Lecturer

Department of Business Administration,  
University of Nairobi, Nairobi.

Signed.....

Date.....

**Prof. Evans Aosa**

Chairman

Department of Business Administration,  
University of Nairobi

## ACKNOWLEDGEMENT

I would like to extend my deepest gratitude to my supervisor, Margaret Chibwa for the amount of time and resources she has spent to assist me with this study. Her advice on many issues in my study, and without which this paper would not be what it is. Her thorough knowledge of concepts in the field is a valuable asset.

*To my mom*

*Anne Wanjiru Mwaura*

I would like to express my appreciation to my friends, family, and all my MBA colleagues. I would also like to thank my dad for his unending support. I am greatly indebted to you.

*and*

To Jennifer, Felicia and Janet, without you this project would not be in hand either. Thank you I also wish to thank the support of the following persons.

Kendrick, Nyambaka, Lata, Rose, Susan and Mwendu.

*The rest of my family*

Lastly, I wish to express my appreciation to my dad James, my mom Anne especially for the love and support. I also thank my brothers and sisters.

*You are Godsend*

John, Michael, Brian, Michael and the rest of the family. Thank you for the love and support that you have been with me. Thank you, and love from your daughter.

*I love you*

## ACKNOWLEDGEMENT

I would like to extend my earnest gratitude to my supervisor Margaret Ombok for the amount of time and resources she has spent to assist me with this study. Her advice on many issues was timely, and without which this paper would not be what it is. Her thorough knowledge of concepts in this study was valuable to me.

I register my appreciation to Kasea, Dr. Musyoka, Mr. Iraki, Fr .Tom, my friends and all my MBA colleagues. I would also like to thank Juma for his enduring support; I am greatly indebted to you.

To Jennifer, Felistus and Janet, without you this project would not be in hard copies. Esther, thank you. I also wish not to overlook the support of the following persons: Kendi, Olga, Nyanducha, Lena, Rose, Serem and Mwivaki.

Lastly, I wish to express my most sincere gratitude to my dad James, mom Anne especially for her love for education, sisters Carol and Jacqueline, and my brothers John, Melvin, Brian, Marlone and niece Mitchell. During this and throughout life you have been with me, thank you, and *may God bless you.*

## ABSTRACT

The objectives of this study were to investigate the perceptions of matatu operators, and commuters as regards matatu service quality in Nairobi, and whether these coincide.

To achieve these objectives samples of 32 matatu operators and 68 commuters were picked and administered with questionnaires that had both semi-structured and likert matrix questions. Out of 68 routes in Nairobi, 4 were judgmentally chosen. The sample of matatu operators was picked from these four routes using a rule of thumb whereby questionnaire was administered to the available operators. For commuters the same process was used.

Data collected was analyzed using percentages, means, standard deviations and indices. Percentages were mainly used to analyze part A and B of the questionnaire, while means, standard deviations and indices were used to analyze part C of the questionnaires to aid in comparison.

Analysis of the data indicated that there is a concurrence by both matatu operators and commuters that provision of prompt service, and the requirement of facilities (like presence of reflectors, fire extinguisher and first aid kit) are important in their perception of service quality. The results showed that service providers do not perceive problem solving variables such as complaint handling, and customer care variables such as courtesy and individualized attention as important. Both groups however perceive loud music as not an important factor of matatu service quality.

These findings therefore led to the conclusion that service providers (matatu operators) and customers (Commuters) perceptions differ, especially in areas that concern dealing with the customers.

On the basis of the findings overleaf, the following recommendations were deemed appropriate:

- That matatu operators need to improve on their complaint handling mechanisms
- Matatu service providers need to build loyalty with their customer bases
- The service providers need to research on the needs and preferences of commuters
- Matatu operators need to observe the rules of public service transport to avoid unnecessary accidents, and lastly,
- Accommodating/relaxing music should be played in place of loud music during matatu rides.

The major constraining factors of this study were: the fact that the sample sizes for both commuters and operators were relatively small compared to their populations. Also because the study did not consider a number of factors which influence perceptions, like income, level of education amongst others.

Last but not least, this study endeavored to suggest areas for future research. These are:

research on perceived quality of service about other industries like the Banking industry, research on areas of consumer satisfaction, and finally, a comparative study on other modes of transport like rail transport could be commissioned.

# TABLE OF CONTENTS

|  | PAGE      |
|--|-----------|
| DECLARATION .....  | i         |
| DEDICATION .....   | ii        |
| ACKNOWLEDGEMENT .....                                    | iii       |
| ABSTRACT .....   | iv        |
| TABLE OF CONTENTS .....                                  | vii       |
| List of tables and figures .....                         | viii      |
| <b>CHAPTER ONE: INTRODUCTION.....</b>                    | <b>1</b>  |
| 1.1 BACKGROUND INFORMATION .....                         | 1         |
| 1.2 PUBLIC PASSENGER TRANSPORT .....                     | 2         |
| 1.3 STATEMENT OF THE PROBLEM.....                        | 6         |
| 1.4 OBJECTIVES OF THE STUDY .....                        | 7         |
| 1.5 SCOPE OF THE STUDY .....                             | 8         |
| 1.6 IMPORTANCE OF THE STUDY.....                         | 8         |
| <b>CHAPTER TWO: LITERATURE REVIEW.....</b>               | <b>9</b>  |
| 2.1 DEFINITIONS OF SERVICE.....                          | 9         |
| 2.2 CLASSIFICATION OF SERVICE .....                      | 10        |
| 2.3 THE UNIQUE CHARACTERISTICS OF SERVICES.....          | 10        |
| 2.4 SERVICE QUALITY .....                                | 11        |
| 2.4.1 Definition .....                                   | 11        |
| 2.4.2 History of service quality.....                    | 12        |
| 2.4.3 Service quality is more difficult to evaluate..... | 12        |
| 2.5 PERCEPTION.....                                      | 14        |
| 2.6 THE CONCEPT OF PERCEIVED QUALITY .....               | 15        |
| 2.7 COMPARISON BETWEEN EXPECTATION AND PERFORMANCE ..... | 17        |
| 2.8 OUTCOMES AND PROCESSES INQUALITY EVALUATIONS .....   | 17        |
| 2.9 SERVICE QUALITY MODEL .....                          | 18        |
| 2.9.1 Service gaps .....                                 | 18        |
| 2.10 DETERMINANTS OF SERVICE QUALITY.....                | 22        |
| <b>CHAPTER THREE: RESEARCH METHODOLOGY.....</b>          | <b>27</b> |
| 3.1 RESEARCH DESIGN .....                                | 27        |
| 3.2 THE POPULATION.....                                  | 27        |

|   |   |           |
|---|---|-----------|
| 3.3   | SAMPLE FRAME .....  | 27        |
| 3.4   | SAMPLE SIZE.....  | 28        |
| 3.5   | SAMPLE DESIGN.....  | 29        |
| 3.6   | DATA COLLECTION METHODS.....  | 29        |
| 3.7   | OPERATIONAL DEFINITIONS.....  | 30        |
| 3.8   | DATA ANALYSIS TECHNIQUES.....   | 32        |
| <b>CHAPTER 4: DATA ANALYSIS AND FINDINGS.....</b>             |   | <b>33</b> |
| 4.1   | INTRODUCTION .....  | 33        |
| 4.2   | Analysis of Commuters .....   | 33        |
| 4.2.1   | Gender .....  | 33        |
| 4.2.2   | Age group .....   | 34        |
| 4.2.3   | Marital status .....  | 34        |
| 4.2.4   | Education level .....   | 35        |
| 4.2.6   | Dislikes in matatu services.....  | 36        |
| 4.2.7   | Overall assessment of matatu services.....  | 37        |
| 4.3   | ANALYSIS OF OPERATORS.....  | 37        |
| 4.3.1   | Gender .....  | 37        |
| 4.3.2   | Education level .....   | 38        |
| 4.3.3   | Designation .....   | 38        |
| 4.3.4   | Complaints received from commuters .....  | 39        |
| 4.4   | COMPARISON BETWEEN THE PERCEPTIONS OF SERVICE PROVIDERS AND THOSE OF<br>CUSTOMERS ..... | 40        |
| <b>CHAPTER FIVE: DISCUSSIONS, SUMMARY AND CONCLUSION.....</b> |   | <b>47</b> |
| 5.1   | INTRODUCTION.....   | 47        |
| 5.2   | DISCUSSIONS AND CONCLUSION.....   | 47        |
| 5.3   | RECOMMENDATIONS.....  | 52        |
| 5.4   | LIMITATIONS OF THE STUDY .....  | 53        |
| 5.5   | SUGGESTIONS FOR FUTURE RESEARCH .....   | 54        |
| <b>REFERENCES .....</b>                                       |   | <b>55</b> |
| <b>Appendices .....</b>                                       |   | <b>1</b>  |
| QUESTIONNAIRE FOR COMMUTERS.....                              |   | 1         |
| QUESTIONNAIRE FOR OPERATORS.....                              |   | 1         |
| SAMPLE FRAME .....  |   | 1         |



## CHAPTER ONE: INTRODUCTION

### List of figures

|  | Page |
|--|------|
| Figure 1: A performance and expectations mismatch .....      | 13   |
| Figure 2: service Quality Model .....                        | 19   |
| Figure 3: Marketing concepts relationships .....             | 22   |
| Figure 4: Conceptual map .....                               | 25   |
| Fig 5: Analysis Commuters (age group) .....                  | 34   |
| Fig 6: Analysis Commuters (Dislikes in matatu service) ..... | 37   |
| Figure 7: Analysis Commuters (assessment) .....              | 38   |
| Fig 8: Analysis Of Operators (Education level) .....         | 39   |
| Fig 9: Analysis Of Operators (Complaints) .....              | 42   |

### List of tables

|   |    |
|---|----|
| Table 4.2(i) Analysis Commuters (Gender) .....  | 33 |
| Table 4.2 (ii) Analysis Commuters (age group) .....                                       | 34 |
| Table 4.2(iii) Analysis Commuters (Marital status) .....                                  | 35 |
| Table 4.2(iv) Analysis Commuters (education level) .....                                  | 35 |
| Table 4.2(v) Analysis Commuters (Traveling frequency) .....                               | 35 |
| Table 4.2(vi) Analysis Commuters (dislikes in matatu service) .....                       | 36 |
| Table 4.2(vii) Analysis Commuters (overall assessment) .....                              | 38 |
| Table 4.3(i) Analysis Of Operators (Gender) .....   | 39 |
| Table 4.3(ii) Analysis Of Operators (education level) .....                               | 39 |
| Table 4.3(iii) a: Fig 8: Analysis Of Operators (Designation) .....                        | 40 |
| Table 4.3(iii) b: Analysis Of Operators (Driver/Tout) .....                               | 40 |
| Table 4.3(iv): Analysis Of Operators (Complaints) .....                                   | 41 |
| Table 4.4 (i) Means and standard deviations for both customers and matatu operators ..... | 43 |
| Table 4.4 (ii) Index For Matatu Operators And Commuters .....                             | 45 |

# CHAPTER ONE: INTRODUCTION

## 1.1 Background information

Between 1964 and 1973, Kenya's Gross Domestic Product (GDP) on average grew by 6.6 per cent per year. Companies operating during this period grew tremendously and needed or felt no much need for strong/strategic brand building activities (not by choice but because the market condition did not seem to warrant that - especially for a young nation like Kenya). Most companies were operating as protected monopolies.

Competition was low and the marketing tools that mattered most were price and product availability; thus, the production concept sufficed (Kibera, 1998).

By mid 1980s, structural constraints had emerged within the economy that were preventing it from achieving the high economic growth rates of the 1960s and 1970s. This led the government to adopt Structural Adjustment Programmes (SAPs) through the publication of Sessional Paper NO.1 of 1986 on *Economic Management for Growth* (Growth Press, 1986). The reforms included price decontrols, removal of all import licensing and foreign exchange controls, and reforms of investment incentives, public enterprise guidelines and the financial system.

These reform and liberalization processes had led to stiff competition. Mbau (2000) further notes that the past one-decade especially has witnessed unprecedented emergence of various forces that have posed serious challenges to the traditional premises and practices of marketing. Capron and Hullan (1999) identify these forces as including stiff competition, globalization of product markets, deregulation, increasing convergence of consumer preferences, dumping, explosion in information technology, a desire to access a portfolio of international brands and difficulty in establishing new brands.

As competition intensifies, (Baker, 1994) observes that organizations have realized that the strength of their brand names, corporate image, effective advertising, price, trademarks, among others are no longer efficient to differentiate them from competitors. Service has become a key differentiator.

\* Service quality is one of the powerful tools that companies can use to gain key competitive advantage. Research reveals that delivering high quality service is closely linked to growth and profits; cost savings and market share in many industries (Lovelock, 1996; Robert et.al, 1987; TARP, 1986; Peters Waterman, 1988). Increase in profit is due to lower customer defection, stronger customer loyalty, more cross selling of products and services and higher margins (Lovelock, 1996).

Lovelock (1996) and Kotler (1999) observe that improved service quality cut costs because companies have fewer customers to replace, less corrective work to do, fewer inquiries and complaints to handle and less employee turn over.

Service quality in a service business such as matatu industry is more complex to assess than it is for manufactured goods. This is due to inseparability, heterogeneity & perishability of services. Devlin and Dong (1994) add that service quality is defined from customers' perspective, that is, comparing service experience to their expectations of what the service performance should be.

Quality is therefore defined in terms of customers' subjective opinion. This is perceived quality. Gronroos (1990) suggests that the perceived quality of a service was the result of an evaluation process in which customers compare their perceptions of service delivery and its outcome against what they expected.

## **1.2 Public Passenger Transport**

This background highlights matatu transportation as a service and establishes a setting for the reader to understand what is basically involved in public passenger transport. It is important to note here that the matatu industry is unique right from its setting, which involves - the commuters; owners and managers; and the operators. "This is an industry ahead of all others. Did they not humble the mighty Stagecoach and Nyayo Bus? Their secret, just-in-time labor force, no driver is permanently employed, no tout is permanently employed, if they cannot produce they can be jobless the next day and you rarely find matatus "on stones" even the registration KX's... are still on the road" (Iraki, 2000).

This industry being in the informal sector, a large part of the matatu business is done informally. For instance, some of the owners do not keep record of business progress. Again, quite a number of the operators are illiterate (though the trend is slowly changing due to the increasing rate of unemployment in Kenya), and the operations are largely male dominated.

The increase in the number of vehicles has accelerated the transportation of people and

**Definition of Matatu:** Is a word derived from the local term "mang'otore matatu" meaning thirty cents, the flat fare that used to be charged in the early days of matatu services. Thus they came to be known as matatus (Langat, 1996).

**T.K.K.:** Abbreviation of three Swahili words "Toa Kitu Kidogo", meaning Kickback or a backhander, handed to the police by Matatu operators so that the police overlook a violation of the traffic rule(s) by operators. This definition was deemed important in the matatu language after discussions with both operators and commuters.

Although the beginning of the automobiles are lost in the midst of un-recorded events of early history, man's concern all over the world with transport led to attempts by many individuals to develop self propelled road vehicles (Omondi, 1988). An impetus was given to the development of an automobile and in 1895, the Lancaster four-wheels were ready, while the famous Rolls Royce Silver Ghost became available in 1907 in Britain. However it was Henry Ford with his "T" model, the producer of some fifteen million cars in the seventeenth years, who really set the scene for the twentieth century expansion of the automobile (Canar, 1979).

Despite the high cost of fuel in Kenya, lack of forex for importation of the completely knocked down (C K D) kits, and increasing prices of motor vehicles (even the "second hands") as a result of the rapid depreciation of the Kenya shilling against the hard foreign currencies, the increase in the number of vehicles appears to be continuing undisturbed (Jaleha, 1993).

Even in the years 1975-1991, in which the cost of the fuel went up at a fast rate, vehicle density increased to a level hardly anticipated.

A study by the World Bank stated that the motor vehicle fleet in Kenya increased by 3.3 % per year over the past decade, with the number of buses and small utility vehicles such as matatus showing the largest increases.

Most of these increases occurred in urban areas where concentration of vehicles was greatest. The study found that 65% of all vehicles were registered in Nairobi, Mombasa, Nakuru and Kisumu, with registration in Nairobi jumping from 124,300 in 1985 to almost 140,000 in 1987 (Majtengi, 1993).

The Increase in the number of vehicles has accelerated the transportation of people and merchandise to the very remote rural areas, thus, enhancing the socio-economic development of the country. (Jaleha, 1993). Despite these developments, the large majority of Kenyans both urban- and rural-based, do not own private means of travel and therefore depend on public transportation. This signifies the important role that the public mode of transport plays in Kenya (Langat, 1996). In Nairobi one would notice a major congestion scenario as commuters crowd for city-center-bound buses and matatus at around 7.00-8.00 am or estate-bound buses and at around 6.00 pm previous studies support this view (Osundwa, 1987 and Kapila, 1982). One of the writers in the publication "Management", (1996) observes that traveling to and from Nairobi (especially in the Central Business District [CBD]), is a nightmarish experience for many people, especially during working days' peak hours.

In the last few years, road transport in Nairobi has seen a number of changes. At a point in time, Nyayo Bus Service NBS Company was providing 'town service' transport in Nairobi along with Kenya Bus Service (KBS)/Stagecoach fleet and matatus. However, due to mismanagement and other reasons, the (NBS) Company went under (Langat, 1996).

Last year, KBS was 'unable to operate' any more for the town service, citing reasons like bad state of the roads, high operational costs, high demand by the contemporary Nairobi residents and lack of a clear policy and guidelines governing town service passenger transport (Mr. Thuo, the Managing Director of KBS Company). Immediately, it introduced its mini-buses to ply various towns' circuit routes. This, they said, would give effective service to the contemporary Nairobi residents. Kenya Bus Service town service fleet, were sold out to new owners.

No sooner did this happen, other privately owned bus companies started operating for town circuit, and started to apply for licenses to operate within the CBD.

All along this transition, matatus have been in the background, increasing in number and in importance of their service. Matatus are in mostly in two models, depending on their passenger capacity/ size. They are the Eighteen (18) -seat capacities (Nissan Matatus) and the twenty- five (25) seat capacity (Mini-Bus) models.

A World Bank report indicates that road transport in developing countries is an important sector of economic activity and investment, and functions as a catalyst to the overall economic and social development process. In Africa road transport accounts for over 80% of all freight and passenger movements and therefore is essential for the operation of African economy (UNCTACDA II, 1990).

Railway transport, which would otherwise provide alternative means of passenger transport, is very sparse in Kenya. Hardly any addition has been made to the lines that were laid down by the colonial government. For this reason, there is extreme lack of flexibility in terms of the destinations served. Passenger transport services to Central Business District (CBD) and back to the estates are available only on the following routes – Kahawa-Dandora-Umoja-town bound train, Embakasi-town bound, and Kibera-town bound trains. However, matatu transport is more feasible in that it has numerous drop-off points, early opening hours all through the day and at times till very late.

A point worth noting is that a number of matatus have stalled operations, or even if still surviving, are in quite a bad state. While the failure of such matatus may not be attributed to one factor only-like high operations costs, lack of visionary management who envisions on customers wants or appropriate management practices is certainly one of them. On the other hand, some have flourished in the business.

To date, the industry has seen numerous matatus being refurbished, with a variety of external - internal décor, color designs and very expensive audio and visual gadgets.

At the same time, other matatus have remained in the same design as bought from the dealers with little or no décor. The Matatu Welfare Association (MWA) chairman Mr.Mbugua (in one of the interviews with the researcher) observes that matatus have increased in numbers and operational routes, more than ever before.

### 1.3 Statement of the Problem

Karemu (1993) observes that service quality is an important tool in a competitive industry. Research reveals that delivering high quality service is closely linked to growth and profits; cost savings and market share in many industries (Lovell, 1996; Robert et al, 1987; TARP, 1986, Peters & Waterman, 1988). In addition, Devlin and Dong (1994) point out that service quality is defined from customer's perspective. This is perceived quality.

Several researches have been carried out on the issue of perceived service quality. Again, several other studies have been conducted on the operations of city buses (Ayooob 1976, Jarabi 1982, Kapila 1982 and Osundwa 1987), however, not a single research has so far addressed perceived service quality on public road transport in Kenya.

A study conducted by Masinde (1986) on perceived quality of service (the case Kenya Airways) found out that the company did not meet passengers' level of expectations on many of the service descriptions.

The findings also led to the conclusion that the attributes of air travel that both travel agents and passengers consider important in choice of an airline-are, unfortunately, the weakest points of Kenya Airways. These weaknesses led to passenger dissatisfaction.

A study on perceived quality of port services by Mwendar (1987) found out that users of the port of Mombasa thought that though their expectations were high for the quality of communications at the port, their perceptions indicated probable dissatisfaction.

A recent study on comparative perceptions of service quality in the retailing industry by Ngatia (2000) found that service providers usually perceive functional dimensions and the availability of the merchandise as important, while the customers, above availability of the merchandise, also perceive human dimensions of service quality (for example, courtesy of helpful employees) as important dimensions of service quality.

There exists very little literature on Matatu services. Again, the studies above were conducted in different areas, for different objectives; hence, the findings cannot be generalized.

Ngatia (2000) observes that researchers have come to a general consensus that service quality does not have any specific definition, and that it depends on the industry under consideration.

A Matatu owner may install expensive musical gadgets; however, a commuter might not necessarily board the Matatu on the basis of its elaborate musical system (Iraki, 2000). There is therefore a need to study perceived service quality of Matatus from the customer's perspective, as Devlin and Dong (1994) observe, that service quality is defined from the customer's perspective.

Parasuraman et.al., (1985) identified failure to understanding customers as a major potential shortfall within the service organization that may lead to a gap between what customers expected and what they receive.

Ngatia (2000) observes that unless the perceptions of both service providers and customers are understood, there will always be a gap in the delivered service by the service providers, and expectations of the commuters.

Iraki (2000) put forth the following question, "Who would not be happy if he or she had a choice on which Matatu to get into?"

This research was therefore aimed at studying in detail, the perceived quality of service in the matatu industry. It attempted to answer the following questions:

- ❖ *What are commuters expectations regarding quality on matatu services?*
- ❖ *What do the matatu service providers regard as quality on matatus?*
- ❖ *Does commuter perceived quality of matatu services coincide with commuters' expectations of these services?*

#### **1.4 Objectives of the study**

1. To investigate what commuters' expectations are regarding quality of matatu services.
2. To investigate what matatu service providers regard as quality on matatus.
3. To investigate whether commuters' expectations and operators' perceptions on quality of matatu services coincide.



## 1.5 Scope of the study

For the purposes of this study, the matatu operations were taken to mean commuter (passenger) services for the town circuit. That is, the research covered matatu services coming to (reaching) Nairobi town, and which go back to destination points classified as “greater Nairobi”.

However the study restricted itself to the following routes, route No: 58(BuruBuru); 44(Kahawa West); 24(Karen) and 118(Wangige). This was in order to narrow down the scope of study.

## 1.6 Importance of the study

### 2.1 Definitions of Services

- 1.This study is expected to benefit the owners, operators and generally, those in the matatu industry, putting into perspective what their customers regard as ‘quality’ and the industry’s image –to the same customers. Efforts can then be put in place or redirected to match the expectations of passengers, and also resources may then be channeled to revamp the areas of weakness, while sustaining the strong points.
- 2.Again, this study is expected to stimulate comparative studies with competitors in the town –service transport, especially KBS’ metro shuttle and the newly introduced town service buses, to assess the extent to which matatu services fall short of (or exceeds) the performance offered by competitors, since, this is undoubtedly a competitive industry.
- 3.The Government of Kenya through the ministry of transport and communication will be able to establish whether to ban ‘loud’ music, tinted windows or even multicolored designs/décor for matatus.
- 4.This study is expected to offer a basis for further academic investigations into areas like ‘image’ analysis for Rail transport (both short and long distance), and other related areas.
- 5.Scholars, academicians and researchers will also find the findings useful for enhancing their understanding on the subject of study and to enrich their stock of knowledge.

## CHAPTER TWO: LITERATURE REVIEW

### 2.0 Introduction

Services must, of necessity concern people dealing with other people (Mwendar, 1987). Different authors have defined Service as a concept differently. Rust et al., (1996) defines service as any act or performance that one party can offer to another that is essentially intangible, and does not result in the ownership of anything. The production may or may not be tied to a physical product (Kotler, 1999).

### 2.1 Definitions of Service

The American marketing association (AMA, 1960) defines services as "activities, benefits, and satisfaction, which are offered for sale or are provided in connection with the sale of goods".

Blois (1978) defined a service as an activity offered for sale that yields benefits of satisfactions without leading to a physical exchange in the form of a good.

Ndegwa (1996) and Masinde(1986) define service as

*"Activities, benefits or satisfactions which are offered for sale or are affected in connection with the sale of goods without leading to a physical exchange of a good or transfer of its title (if any) being effected"*.

For the purpose of this study, the researcher will adopt the definition given by Ndegwa (1996) since it is fairly encompassing than the other two.

The above definition has the following implications

- ❖ The entity that is under consideration must be intangible although perceived
- ❖ Marketing exchange occurs
- ❖ Something of value is acquired by the purchased as an activity benefit or satisfaction.

## 2.2 Classification of service

Many writers due to the difficulty of giving one definition of service that will encompass all services and have universal meaning have attempted to classify services. These attempts have produced lists and examples, which as time passes, may only serve as headings of service (Converse et al., 1958).

Kotler (1985) classified Services as either people based or equipment based.

On the other hand according to Chase (1978) services can be classified by degree of customer contact in the creation of the service.

Further, Kotler (1985) classifies services four-fold according to the motives of the service provider. Service providers have been known to be either profit maximizers or non – profit oriented entities and either public or private organizations. In our case the matatu industry belongs to the profit maximizing public organizations.

The variations in classification imply the difficulty of categorizing services into clearly deliverable segments that would lend themselves to generalized approaches and techniques.

Notwithstanding the importance such classifications have on putting this study into perspective, services generally have certain unique characteristics that shed more light on their definition.

## 2.3 The unique characteristics of services

The marketing of services has its special problems due to the unique characteristics that services have (Masinde, 1986) and (Kotler 1985).

These include

- (i) Intangibility of what is being offered on the market
- (ii) Inseparability of buyer and seller
- (iii) Variability in what is being offered on the market
- (iv) Fluctuations in demand and supply

Each of these unique characteristics has varying degrees of effect on various services, including matatu service industry and the marketer of matatu services needs to tackle the unique situations that arise in order to enhance the perceived quality of his/her services.

## 2.4 Service Quality

### 2.4.1 Definition

Marketers of service experience difficulty in understanding and controlling quality (Zeitham et. al., 1986). This is because services are performances rather than objects and therefore precise manufacturing specifications for uniform quality rarely can be established and enforced by the firm (Zeitham et.al, 1988).

Christopher et.al. (1997) and Baker (1994) saw service quality as concerned with meeting or exceeding customers' expectations.

Japanese philosophy defines quality as 'zero defects- doing it right the first time.'

Crosby (1979) defines quality as conformance to requirements.

Deming (1996) defines quality as a predictable degree of uniformity and dependability at low cost and suited to the market; that, quality does not mean high quality. His approach advocates getting things done right the first time by bringing the customer into the organization.

According to Juran (1996) quality is fitness for use or conformance to specifications. Philip Crosby (1996) defines quality as conformance to requirements. He defines proof of service as flawless performance or zero defects. This means 100% satisfying performance from the customer's point of view. Costs of not achieving flawless performance is the cost of quality which includes the cost of redoing the service, compensating for poor service, loss of customers and negative word of mouth.

According to Ross (1996), quality is defined by the customer. It begins and ends with the customer." Tom Peters says, "Unfortunately we can no longer afford to merely satisfy the customer. To win today, you have to delight and astound our customers with services that far exceed their expectations". Understanding service quality requires more than knowledge on goods quality.

The unique characteristics of services- intangibility, heterogeneity and inseparability must be acknowledged for a full understanding of service quality.

The conceptualizing of service quality into a definition that captures all variables has remained elusive to many researchers. Hubbert (1995) observes that although the three constructs are distinct, they are related attributes of consumer perceptions of service quality. These definitions shows that service quality is not a one occurrence act but it is a set of processes from pre-transaction to post-transaction stage.

Parasuraman et.al. (1985) in developing the service quality model defined service quality as the gap between expected service and perceived performance.

#### **2.4.2 History of service quality**

The domain of service quality began in earnest in late 1970's with the realization by firms that competitive environment required proactive ways in order to remain competitive, profitable and successful. This revolution could be traced in part to a study of top performing companies, which drew attention to the efforts they were placing on 'getting closer to their customers'.

The efforts by organizations to focus on service quality swathe dawn of service quality research in the late 1970's through 1980's. Rust and Oliver (1994) observes that arguably the most significant pioneer in the field include C. Gronroos who established a research agenda for service quality for he introduced the first comprehensive model of service quality. Parasuraman et.al (1985) amplified the model and refined Gronroos framework and devised an influential service quality rating scale, which came to be referred to as SERVQUAL.

#### **2.4.3 Service quality is more difficult to evaluate**

Consumers when purchasing goods employ many tangible cues to judge quality. When purchasing services fewer tangible cues exist (Mukiri, 2001). In most cases, tangible evidence is limited to the service provider's physical facilities, equipment and personnel. In absence of tangible cues, consumers must depend on other cues. The nature of these cues has not been extensively researched.

Some suggest that price becomes a pivotal quality indicator in situations where information is not available. (McConnell, 1968; Olander, 1970; Zeithaml, 1981).

If a service provider knows how the consumer will evaluate the service then it is possible to suggest ways on how to influence these evaluations in a desired direction (Gronroos, 1982).

Christopher et al (1997) note that service quality is the ability of the organization to meet or exceed customer expectations. In this context, customers' expectations maybe defined as the desires or wants of customers, that is, what they feel a service provider should offer rather than would offer. It is worth noting that in an industrial marketing or business-to-business context, the concept of expectations might be modified to encompass the idea of 'negotiated' expectation. That is, service quality is measured in terms of the extent to which performance as perceived by the customer meets or exceeds levels of service.

To complete the definition of service quality we must emphasize that the measure of performance is essentially a measure of perceived performance.

In other words, it is the customer's perceptions of performance that counts rather than the reality of performance. Christopher et al (1997) further argue that as far as quality of service is concerned then 'perceptions are reality'.

The figure below presents a situation where expectations and perceived performance do not coincide.

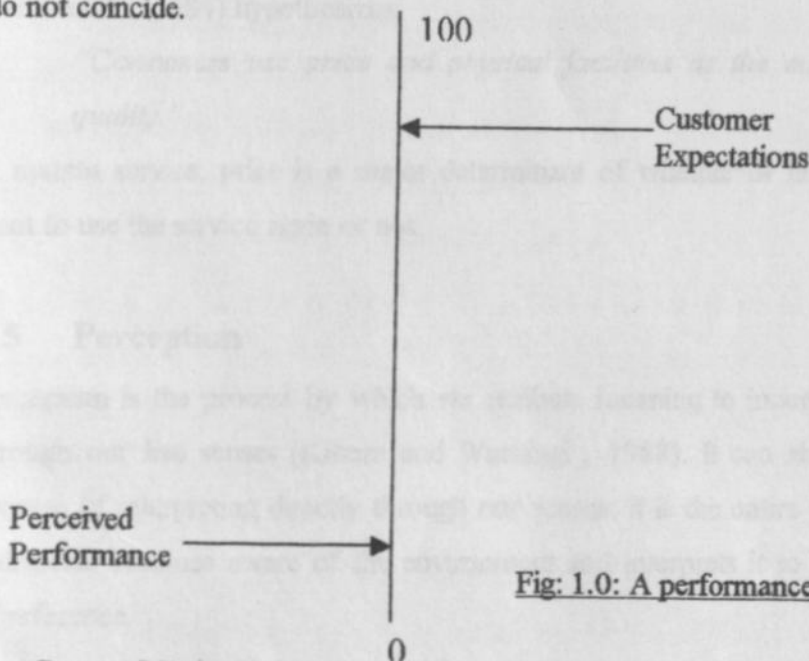


Fig: 1.0: A performance and expectations mismatch

Source: Martin Christopher, Adrian Payne, David Ballantyne, 1997, Relationship marketing: bringing Quality, Customer Service and marketing Together.

Due to the intangible nature of services, consumers opt from among virtually indistinguishable alternatives and through experience develop an attitude towards the service.

After this, they learn more about the service and their selective perception causes them to concentrate on corroboration of the developed attitude. As Lovelock (1984) hypothesizes,

*"Consumers engage in more post-purchase evaluation than pre-purchase evaluation when selecting and consuming services."*

In the case of matatu services, commuters' using the matatus evaluate the quality of the matatu service after they have used these services and they 'pass the word on' to those who are yet to use the matatu. What this latter group is told about the experiences during the matatu service greatly determines whether or not, and how, the prospective buyers of the services will wish to purchase such services. Also due to the intangibility of services, the criteria for evaluating their quality are limited.

In the case of goods, their quality can be judged from the style, color, feel, package, price and other such factors. In the case of services, such indicators are limited to price and the physical facilities, which house the service.

As Lovelock (1984) hypothesizes,

*"Consumers use price and physical facilities as the major cues of service quality."*

In matatu service, price is a major determinant of whether or not a service user will want to use the service again or not.

## **2.5 Perception**

Perception is the process by which we attribute meaning to incoming stimuli received through our five senses (Kibera and Waruingi , 1988). It can also be defined as the process of interpreting directly through our senses: it is the entire process by which an individual becomes aware of the environment and interprets it to fit in his own frame of reference.

According to Kibera and Waruingi (1988), perception of an object or event is the result of the interaction of two types of factors.

- Stimulus factors, which are Characteristic of the physical object such as size, color, weight or shape.
- Individual factors, which are characteristic of the individual. These factors include not only sensory processes but also past experience with similar items, basic motivation and expectations.

Marketers are interested in perception because it involves what customers believe. To provide satisfaction effectively in the market place, marketers must understand how all their marketing activities are perceived because perception greatly influence buyer behavior. Consumers perceive the same situation differently.

Kibera and Waruingi (1988) point out the following perception characteristics:

- Consumer perception is subjective
- Perception of the consumer is selective
- Perception of the consumer is time related
- Consumer perception is summative. Consumers take many sensations that reach their awareness almost simultaneously.

These summations are summed up into a complete and unified whole before a consumer can react to them.

It is difficult to conceive how consumers could ever make their minds to buy if it were not for the fact that perception is summative.

## **2.6 The concept of Perceived Quality**

Perceived quality can be defined as the customer's perception of the overall quality or superiority of a product or service with respect to its intended purpose, relative to alternative, Zeithaml (1988). Perceived quality is, first, a perception by consumers. It thus differs from several related concepts such as actual or objective quality which refers to the extent to which the product or service delivers superior service; product based quality which refers to the nature and quantity of ingredients, features or service included; and manufacturing quality which refers to conformance to specification, the "zero defect" goal.



Perceived quality cannot necessarily be objectively determined, in part because it is a perception and also because judgments about what is important to customers are involved.

As Jack F. Welch, Chairman and CEO of General Electric said "The customer...rates us better or worse than somebody else. It is not very scientific but it's disastrous if you score low" (Welch, 1981).

Griffin (1992) developed a model in which he suggests that consumers compare the Perceived quality is defined to an intended purpose and a set of alternatives. The fact that an outlet does not deliver the same level of personal service, quality of merchandise and the same store ambience does not mean that it will have a lower perceived quality – it may be judged by a different set of criteria perhaps ease of parking, waiting time at checkouts, courtesy of the checkout people and whether desired items are in stock (Schiffman and Kanuk, 1997). Perceived quality differs from satisfaction. A customer can be satisfied because he or she had low expectations. Perceived quality also differs from attitude – a positive attitude could be generated because a product of inferior quality is very inexpensive. Conversely, a person could have a negative attitude toward a high quality product that is overpriced. Perceived quality is an intangible, overall feeling about a brand.

Steiner, Olsen and Jacoby (1977) showed that consumers judge the quality of a product or service on the basis of a variety of informational cues that they associate with the product. These informational cues have been dichotomized into intrinsic and extrinsic cues (Olson 1977; Olson and Jacoby, 1972). Intrinsic cues involve the physical component of the product (e.g. flavor, color, texture etc). In the case of color for example, a consumer products company developed a "better" window cleaner, which was essentially colorless.

Extrinsic cues on the other hand are product related but not part of the physical product itself. They are by definition outside the product e.g. price, brand name level of advertising among others.

## **2.7 Comparison between expectation and performance**

Researchers and manager of service firms concur that service quality involves a comparison of expectations with performance.

Lewis and Booms (1983) looked at service quality as a measure of how well the service level delivered matches customer expectations.

Gronroos (1982) developed a model in which he contends that consumers compare the service they expect with perceptions of the service they receive in evaluating service quality.

Smith and Houston (1982) claimed that satisfaction with services is related to confirmation or disconfirmation of expectations. They based their research on the disconfirmation paradigm, which maintains that satisfaction is related to the size and direction of the disconfirmation experience where disconfirmation is related to the person's initial expectations (Churchill and Suprenaut, 1982).

The measure of performance is essentially a measure of perceived performance that counts rather than the reality of performance (Christopher et. al. 1991).

## **2.8 Outcomes and processes in quality evaluations**

Sasser, Olsen and Wyckoff (1978) discussed three different dimensions of service performance: levels of material, facilities and personnel. This implies that service quality involves more than outcome; it also includes the manner in which the service is delivered.

Other research on service quality brought out this notion. Gronroos (1982) postulated that two types of service quality exist:

- i) Technical quality which involves what the customer is actually receiving from the service, and
- ii) Functional quality, which involves the manner in which the service is delivered.

## 2.9 Service Quality Model

### 2.9.1 Service gaps

Products can be good or impressive on their own but this is not what the customer wants. The products and services should meet the customer's needs. It is important that the said company's products meet the needs and expectations of the customer (Okatch, 2000).

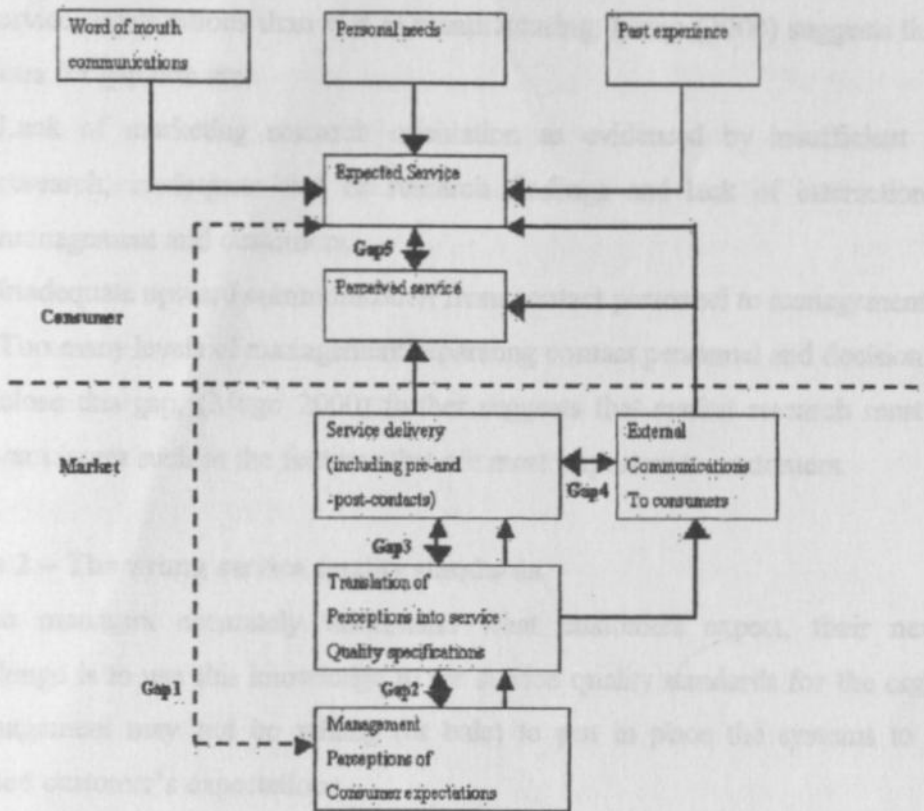
Customers generally have expectations of quality delivery based on word of mouth, past personal needs and external communications from the service provider experience Owino (1996) identified five gaps, which lead to poor service quality; the major contributing factors to the gaps and finally presented a model for continuously reducing the gaps and hence improving service quality. Palmer (1992) identified five gaps where there may be a shortfall between expectation of service level and perception of actual service delivery.

Gronroos (1982) introduced the first comprehensive model of service quality.

Parasuraman et al., (1985) amplified the model and refined Gronroos' framework.

Research by Parasuraman et al., (1985) has indicated that consumers' quality perceptions are influenced by a series of four distinct gaps occurring in organizations.

Figure 2: service Quality Model



Source: A. Parasuraman, Valarie A. Zeithaml and Leonard L. Berry, "A Conceptual Model of Service Quality and its implications for future research," *Journal of Marketing*, Fall 1985, p. 44

### Gap I: Not knowing what customers expect

Knowing what customers expect is the first and most critical step in delivering quality service. Providing a service that customers perceive as excellent requires that a firm know what customers expect. Being a little bit wrong can mean expending money, time and other resources on things that do not count to customers, or even not surviving in a fiercely competitive market.

For instance, a matatu owner can expend money on investing heavily on musical gadgets, while the customers prefer music free journey.

The difference between what customers expect and what management perceives they expect is often the result of overlooking the need to fully understand customer's expectations.

Since service has few clearly defined and tangible cues, gap one is consistently larger in service organizations than it is in manufacturing. Mugo (2000) suggests that the key reasons for gap one are:

- ❖ Lack of marketing research orientation as evidenced by insufficient marketing research, inadequate use of research findings and lack of interaction between management and customers.
- ❖ Inadequate upward communication from contact personnel to management
- ❖ Too many levels of management separating contact personnel and decision makers

To close this gap, (Mugo 2000) further suggests that market research must focus on relevant issues such as the features that are most important to customers.

## Gap 2 – The wrong service quality standards

Once managers accurately understand what customers expect, their next critical challenge is to use this knowledge to set service quality standards for the organization. Management may not be willing (or able) to put in place the systems to match or exceed customer's expectations.

Resources constraints, short-term profit orientation market conditions or management indifference could all account for gap two (the discrepancy between manager's perceptions of customers expectations), if the actual specifications they establish for service delivery. Almost always, change requires a willingness to be open to different ways of structuring, calibrating and monitoring the way the service is provided. Key reasons for gap two are

- ❖ Inadequate commitment to service quality
- ❖ Lack of perception of feasibility
- ❖ Inadequate task standardization
- ❖ Absence of goal setting.

It is critical for top management to constantly and visibly express their commitment to contact employees of middle management. The firm should be open to innovation, receptive to different and possibly better ways of doing business (thinking big) and these are key to perceiving feasibility.

### Gap 3 – The service performance gap

In some cases, management understands customer's expectations, sets appropriate specifications and still the service delivered by the organization falls short of customer expectations. The difference between service specifications and the actual service delivery is the service performance gap: when employees are unable if/or unwilling to perform the service at the desired level. Unfortunately this service – performance gap is common in the service industry.

Key reasons for gap 3 are

- ❖ Role ambiguity
- ❖ Role conflict
- ❖ Poor employee – job fit
- ❖ Poor technology – job fit
- ❖ Inappropriate evaluation/compensation systems
- ❖ Lack of teamwork

Empowering employees to satisfy customers helps to reduce gap three.

### Gap 4 – When promises do not match delivery

Accurate and appropriate company communication –advertising, personal selling, and public relations that do not over promise or over represent a product or service essential in delivering service that customers perceive as high in quality.

The gap between what a firm promises about the service or product and what it actually delivers must be consciously and deliberately minimized.

Because of the less controllable nature of human beings (as opposed to machines), the potential to over promise on service is high.

When advertising, personal selling or any other external communication set up unrealistic expectations for customers, actual encounters disappoint them .It is the role of marketing to ensure that external communications accurately (if compellingly) reflect what happens in actual service encounters, while operations in turn, must deliver the promise.

Key reasons for gap four are:

- Inadequate horizontal communication particularly between operations, marketing and human resources, as well as across branches.
- Propensity to over – promise in communications.

Service quality is the discrepancy between customer's expectations and customer's perception of the delivered service. This discrepancy is gap five and is made of gaps one, two, three and four.

The objective of managements in organizations that wish to maintain a competitive edge in quality service delivery is to close the gaps in all the four cases above. These results in closing the ultimate gap between the customer expectations and the customer perception of the quality of service delivered (Sokoni 1996).

#### **GAP 5 Expected service – perceived service gap**

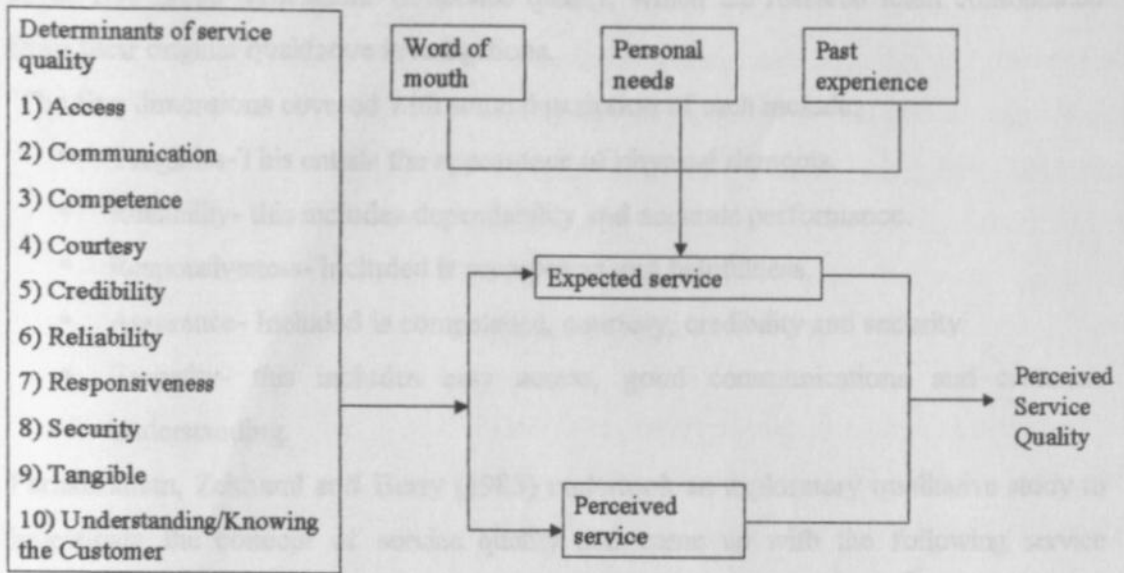
The quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between service and perceived service. This gap is influenced by the four preceding gaps. There is little chance of management acting in any meaningful way to close the gap between performance and expectations if these two key variables are not defined and measured. If the gaps are great, the task of bridging the subsequent gaps becomes greater and indeed it could be said that in such circumstances quality service can only be achieved by good luck rather than good management (Mugo, 2000).

### **2.10 Determinants Of Service Quality**

Parasuraman et. al. (1985) suggested that there are a number of basic dimensions of service quality that can be generalized across markets. These are: reliability, responsiveness, assurance, empathy and tangibles. These dimensions were derived from extensive multi-market research and are a reduction from ten service elements as shown in the figure hereunder. These generic factors can be used as the basis form measuring service performance.

These dimensions could be used as a starting point and then expanded to the industry or market specific (Christopher et. al., 1991).

**Figure 3: Marketing concepts relationships**



*Source:* Martin Christopher, Adrian Payne, David Ballantyne, 1991, Relationship marketing: bringing Quality, Customer Service and marketing Together.

Kotler (1997) summarized the determinants of quality service into five as indicated below:

- Reliability, which is the ability to perform the promised service dependably and accurately.
- Responsiveness, which is the willingness to help customers and provide prompt service.
- Assurance, which refers to the knowledge and courtesy of employees and their ability to convey trust and confidence.
- Empathy, which refers to the provision of caring, individualized attention to customers.
- Tangibles, which refers to the appearance of physical facilities, equipment, personnel and communication materials.

According to Palmer (1992) for companies to better understand the expectations and perceptions of their customers can use the SERVQUAL technique. It is applicable across a broad range of service industries and can be easily modified to take account of the specific requirements of a company.



SERVQUAL is based upon a generic 22-item questionnaire, which is designed to cover five broad dimensions of service quality, which the research team consolidated from their original qualitative investigations.

The five dimensions covered with some description of each include:

- Tangibles-This entails the appearance of physical elements.
- Reliability- this includes dependability and accurate performance.
- Responsiveness- Included is promptness and helpfulness.
- Assurance- Included is competence, courtesy, credibility and security.
- Empathy- this includes easy access, good communications and customer understanding.

Parasuraman, Zeithaml and Berry (1985) undertook an exploratory qualitative study to investigate the concept of service quality and came up with the following service determinants:

Reliability, Responsiveness, Competence, Access, Courtesy, Communication, Credibility, Security, Understanding/ knowing the customers, and Tangibles.

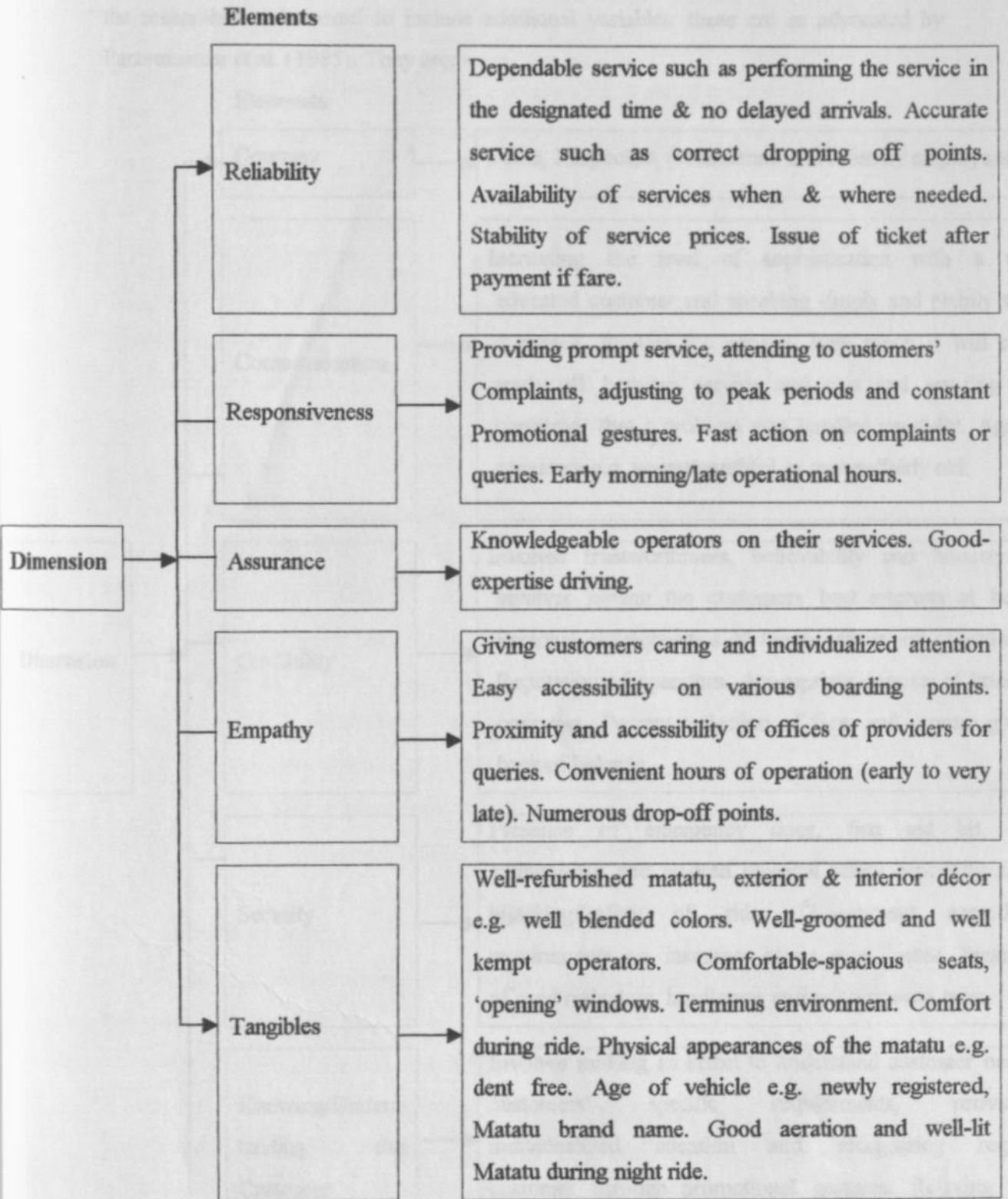
### CONCEPTUAL MAP

From the literature review it may be deduced that there may exist some gaps between both the commuters' and the service providers' perceptions of quality service.

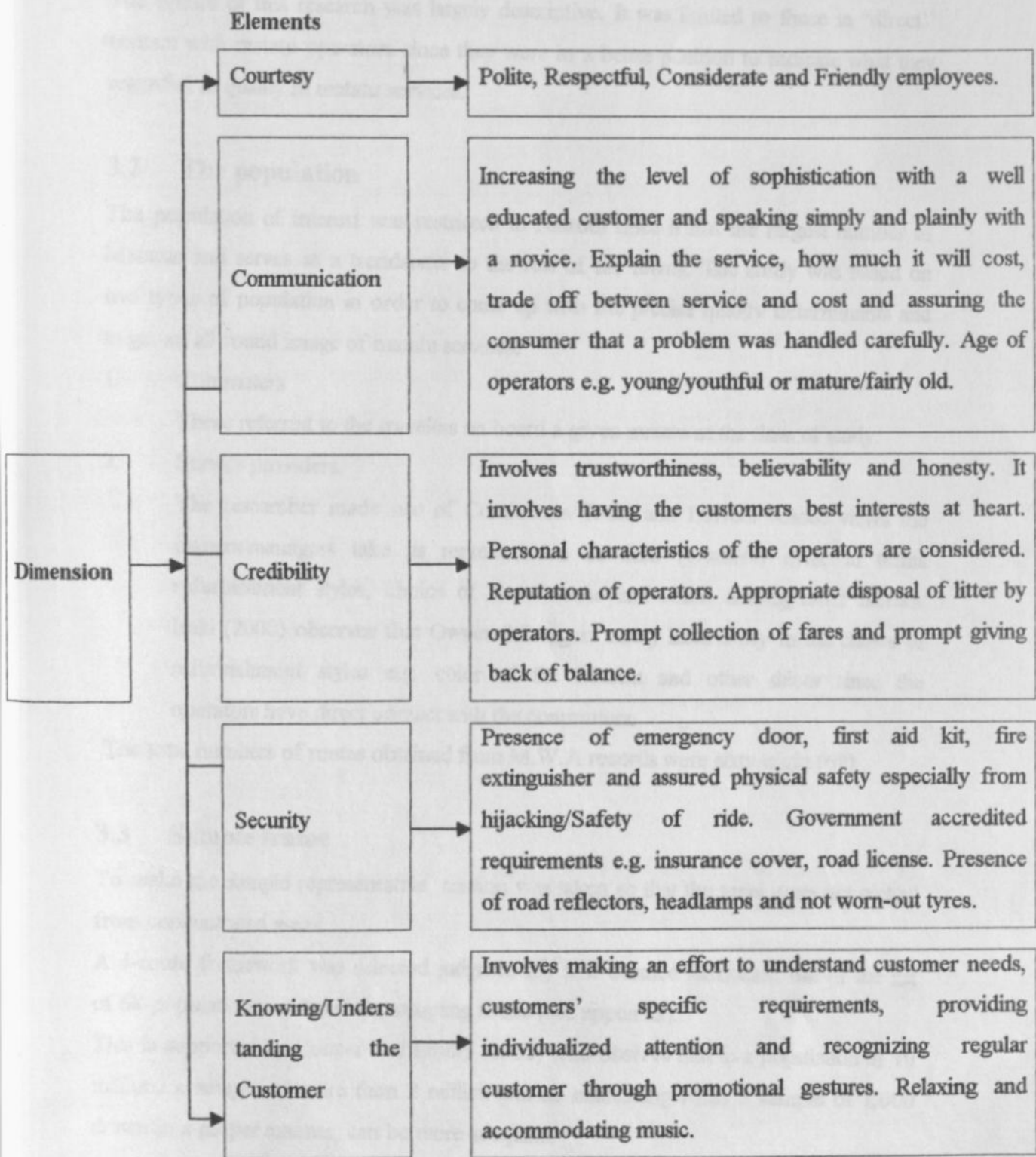
Regardless of type of service, consumers tend to use similar criteria in evaluating service quality. Kotler (1997) has summarized them into five classes, which include reliability, responsiveness, assurance, empathy and the tangibles. *This study will make use of these variables and operationalize them* (See research methodology). Matatu service provision like any other service is equally difficult to market due to the unique characteristic of services namely intangibility, heterogeneity, inseparability and perceivability.

The study will take the format used to test SERVQUAL instrument (Whereby research adapted twenty two item questionnaire to test the five basic dimensions of quality). The researcher will therefore endeavor to test these five dimensions as postulated by Kotler (1997) including their elements in the questionnaire. These dimensions and the elements are:

Figure 4: Conceptual map



Due to the unique nature service marketing (in this case marketing Matatu services) the researcher endeavored to include additional variables: these are as advocated by Parasuraman et.al. (1985). They are: -



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Research design**

The nature of this research was largely descriptive. It was limited to those in "direct" contact with matatu operators since they were in a better position to indicate what they regarded as quality in matatu services.

### **3.2 The population**

The population of interest was restricted to Nairobi since it has the largest number of Matatus and serves as a trendsetter to the rest of the towns. The study was based on two types of population in order to come up with the precise quality determinants and to get an all-round image of matatu services.

#### **1. Commuters**

These referred to the travelers on board a given matatu at the time of study.

#### **2. Service providers.**

The researcher made use of Conductors/Touts and Drivers whose views the owners/managers take as representative of their (Owners) own, in terms refurbishment styles, choice of brand name and color, among other factors. Iraki (2000) observes that Owners/Managers rarely have a say in the choice of refurbishment styles e.g. color of the Matatu and other décor since the operators have direct contact with the commuters.

The total numbers of routes obtained from M.W.A records were sixty-eight (68).

### **3.3 Sample frame**

To make the sample representative, caution was taken so that the units were not picked from concentrated areas.

A 4-route framework was selected judgmentally and deemed sufficient, out of the list of 68-population members/ the sampling frame (see appendix).

This is supported by Cooper and Emory (1995) who observe that in a population of 10 million, a sample of more than 2 million can be misleading while a sample of 1,000 drawn in a proper manner, can be more adequate.

The selected routes were:

58(BuruBuru), 44(Kahawa West), 24(Karen) and 118(Wangige).

The approximate numbers of permanent matatus in these respective routes are:

|                  |       |     |
|------------------|-------|-----|
| (58) BuruBuru    | ----- | 100 |
| (44) Kahawa West | ----- | 500 |
| (24) Karen       | ----- | 32  |
| (118) Wangige    | ----- | 300 |

*Source: Daily matatu records maintained at terminus*

The justification of choice of these judgmentally was because: route (44) has most matatus (500); route (24) has the least (32). Route (58) represented all those routes that have KBS Metro Shuttle plying these routes; in addition, a commuter train plies adjacent to this route (at Umoja halt). Route (118) was selected because it has the highest number of matatus for those routes reaching the "greater Nairobi" from Town, and also because the researcher would like to sample the faculty of commerce (Lower Kabete campus) fraternity, located along this route. Judgmental sampling was used by Mukiri (2001) successfully.

Sampling was done on these 4 routes. Other suitable routes were not sampled. The selected routes however, were expected to show a fair presentation of the matatu business at any one time.

The researcher was unable to determine the commuter population of the selected routes.

### 3.4 Sample size

#### 1. Commuters

The questionnaire was administered to seventeen- (17) respondents for every selected route. This gave a sample size of (sixty eight)-68 for commuters.

#### 2. Service providers.

Since most of these operators were not licensed, the researcher visited the various route terminus (the ones selected from the sampling frame) as they queued and administered the questionnaire.

A sample size of 32 was deemed suitable. That is, for every selected route, eight operators were sampled.

A total sample of a hundred (100) was deemed appropriate.

This conforms to the widely held rule of thumb that, to be representative, a sample should have thirty- (30) or more test units (Wayne and Terrell, 1975).

### **3.5 Sample design**

The sample units were selected by convenience method. Being a non- probability sampling technique, Convenience sampling carefully controls cost and time, and often gives acceptable results (Cooper and Emory, 1995). Again, the total population may not be available, as in our case.

### **3.6 Data collection methods**

The study made use of primary data. The survey method was used to collect data and this was through the issuing of a questionnaire. This was convenient since it would provide a standard set of questions for all respondents to answer.

The researcher obtained an introductory letter from the MBA office to help facilitate data collection. The data collected was used to determine what commuters and service providers perceive to be quality service and establish whether there exist any gaps on perceived service quality. Respondents were asked questions revolving around what they perceived to be quality service.

The questionnaire(s) were distributed by hand to each of the commuters as they were waiting to travel back home from town, or as soon as they alighted from the matatu since then, they could afford to spare some time to attend to the questionnaire.

The questionnaires were also distributed to the service providers (operators) at their respective terminus or any other convenient place, like during their garage or "service" sessions.

The respondents filled the questionnaire as the researcher waited; this approach was to help reduce non-response rate.

Where necessary, like in case of illiteracy barrier, which may not have allowed some respondents to answer the questionnaire, an interview was conducted to assist in filling in the questionnaire.

Closed-ended questions captured the respondents' perceptions of the various variables that constitute matatu service quality.

The open-ended questions were also incorporated in the questionnaire, and this enabled the research to achieve all of its objectives.

Questionnaire one was to capture commuter responses, help to achieve objective one.

Questionnaire two captured what the Matatu service providers regard as quality.

Objective three was stemmed out after determining the first two objectives.

### 3.7 Operational definitions of variables

To determine the commuter and the service provider's perception of quality service and whether any gaps exist, the variables summarized by Kotler (1997) were operationalized. These variables included reliability, responsiveness, assurance, empathy and tangibles. Palmer (1992) and Karau (1998) also agreed to these variables.

| Dimension      | Elements   |
|----------------|--|
| Reliability    | Dependable service such as performing the service in the designated time and no delayed arrivals. Accurate service such as correct dropping off points. Availability of services when and where needed. Stability of service prices. Issue of ticket after payment of fares. |
| Responsiveness | Providing prompt service, attending to customers' Complaints, adjusting to peak periods and constant Promotional gestures. Fast action on complaints or queries. Early morning/late operational hours.   |
| Assurance      | Knowledgeable operators on their services.<br>Good-expertise driving.  |
| Empathy        | Giving customers caring and individualized attention<br>Easy accessibility on various boarding points. Proximity and accessibility of offices of providers for queries.<br>Convenient hours of operation (early to very late).<br>Numerous drop-off points.                  |
| Tangibles      | Well refurbished matatu; exterior & interior décor e.g. well blended colors. Well-groomed and well kempt operators. Comfortable-spacious seats, 'opening' windows.   |

Terminus environment. Comfort during ride. Physical appearances of the matatu e.g. dent free.

Age of vehicle e.g. newly registered, Matatu brand name. Good aeration and well-lit Matatu during night ride.

Due to the unique nature service marketing (in this case marketing Matatu services) the researcher endeavored to include additional variables: these were as advocated by Parasuraman et. al. (1985). They are: -

- |                                    |  |
|------------------------------------|--|
| Courtesy                           | Polite, Respectful, Considerate and Friendly employees.  |
| Communication                      | Increasing the level of sophistication with a well educated customer and speaking simply and plainly with a novice. Explain the service, how much it was cost, trade off between service and cost and assuring the consumer that a problem was handled carefully. Age of operators e.g. young/youthful or mature/fairly old. |
| Credibility                        | Involves trustworthiness, believability and honesty. It involves having the customers best interests at heart. Personal characteristics of the operators were considered. Reputation of operators. Appropriate disposal of litter by operators. Prompt collection of fares and prompt giving back of balance                 |
| Security                           | Presence of emergency door, first aid kit, fire extinguisher and assured physical safety especially from hijacking, Safety of ride. Government accredited requirements e.g. insurance cover, road license. Presence of road reflectors, headlamps and not worn-out tyres,  |
| Knowing/Understanding the Customer | Involves making an effort to understand customer needs, customers' specific requirements, providing individualized attention and recognizing regular customer through promotional gestures. Relaxing and accommodating music.  |



Respondents were asked to specify the importance of the variables and this was assessed as follows:

- The scores on both 'not important' and 'not important at all' were taken to represent dissatisfaction with quality service and negative attitude towards the service.
- The scores on somewhat important was taken to represent indifference, neutral or noncommittal to the quality of service.
- The scores on both important and very important were taken to represent satisfaction with the quality service and a positive attitude towards the quality of service.

The respondents were asked to specify the importance of the various and scores was put to represent negative, neutral or positive perception of service quality.

The perceptions were then analyzed to see if there exist any gaps between the customer and organization perception of quality service and recommended strategies for closing the gap.

### **3.8 Data analysis techniques.**

Questionnaires were edited for completeness and consistency.

The data obtained shall be used to test Gap5 (which is made up of all the other four gaps) that is, the Gap between perceived service and expected service.

The study was modeled on description and therefore descriptive statistics was used on parts A and B of both questionnaires Proportions, percentages and frequencies was used to summarize data. In part C of both questionnaires descriptive statistics such as mean and standard deviation was used for comparison purposes. Respondents' opinions and attitudes was assessed on 1=*Not important at all* to 5=*very important likert scale* by calculating the average and the total average scores.

This was in order to determine the perception of service quality variables. Indexes were calculated in order to establish whether majority of the respondents were of the perceptions that variables were important or not important. Tables and graphs were used to present the information. These tools have been selected because of their clarity, preciseness, ease of understanding and interpretation. These tools of analysis were used successfully by Masinde (1986), Mwendar (1987) and Ngatia (2000).

# CHAPTER 4: DATA ANALYSIS AND FINDINGS

## 4.1 Introduction

In this chapter, the collected data was analyzed using excel package tools for simplicity. Specifically, proportions, percentages and frequencies were used to summarize the data. Indexes were also calculated in order to determine the perceptions of the respondents.

The findings were presented in two categories namely, that related to commuters and those related to operators.

The response rate of operators and commuters were 27 (84%) and 58 (85%) respectively, which the researcher deemed adequate and sufficient for the study for the purpose of data analysis. They compare favorably with other studies such as 55% response rate by Karemu (1993), and 62% by Lagat (1995).

## 4.2 Analysis of Commuters

### 4.2.1 Gender

Table 4.2(i) Analysis of Commuters (Gender)

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Women  | 34        | 59%        |
| Men    | 24        | 41%        |
| Total  | 58        | 100%       |

Source: Research data

From table 4.2(i) above it can be concluded that women formed a larger percentage of respondents. This can be attributed to the fact that women are more in population than men. This confirms a widely held belief that in our economy fewer women ride in private cars than men.

#### 4.2.2 Age group

Table 4.2 (ii) Analysis of Commuters (age group)

| Age group | Frequency | Percent |
|-----------|-----------|---------|
| 19 to 24  | 21        | 36%     |
| 25 to 29  | 25        | 43%     |
| 30 to 34  | 6         | 10%     |
| 35 to 39  | 2         | 3%      |
| Above 40  | 4         | 7%      |
| Total     | 58        | 100%    |

The results above indicate that majority 25(43%) of the respondents falls in the ages between 25 to 29. Along this 21(36%), fall in the age group 19 to 24, while the least respondents were those in the age group between 35 and 39.

#### 4.2.3 Marital status

Table 4.2(iii) Analysis of Commuters (Marital status)

| Marital Status | No | Percentage |
|----------------|----|------------|
| Single         | 45 | 78%        |
| Married        | 13 | 22%        |
| Total          | 58 | 100%       |

The results of the study indicate that a larger part of the respondents, 45(78%) were single compared to the married 13(22%). This suggests that a large percentage of commuters is composed of single persons.

#### 4.2.4 Education level

Table 4.2(iv) Analysis of Commuters (education level)

| Education  | No<br>(Commuters) | Percentage |
|------------|-------------------|------------|
| Primary    | 1                 | 2%         |
| Secondary  | 3                 | 5%         |
| College    | 9                 | 16%        |
| University | 45                | 78%        |
| Total      | 58                | 100%       |

In the study 78% of the respondents were either at the university or university graduates while only as little as 2% were of primary level. This could be attributed to the form of the study design.

#### 4.2.5 Traveling frequency

Table 4.2(v) Analysis of Commuters (Traveling frequency)

| Travel frequency | No | Percentage |
|------------------|----|------------|
| More once a day  | 3  | 5%         |
| Everyday         | 39 | 67%        |
| 2 a week         | 6  | 10%        |
| 3 a week         | 5  | 9%         |
| Other            | 5  | 9%         |
| Total            | 58 | 100%       |

Most commuters travel everyday 67% while those who travel more than once a day formed 5% of the respondents. This could be attributed to the fact that these people travel to work daily. This means that quite a number of commuters in Nairobi travel to CBD (central business district) frequently.

Other responses that were given for frequency of travel include

- Never
- Once a month
- Twice a month

#### 4.2.6 Dislikes in matatu services.

Table 4.2(vi) Analysis of Commuters (dislikes in matatu service)

| Dislikes                                | No<br>(Commuters) | Percent |
|---|-------------------|---------|
| Hiking of prices                        | 34                | 59%     |
| Unprompt return of change               | 32                | 55%     |
| Impolite & not courteous operators      | 43                | 74%     |
| Reckless driving                        | 46                | 79%     |
| Loud music                              | 34                | 59%     |
| Uncomfortable seats                     | 36                | 62%     |
| Overloaded matatus                      | 36                | 62%     |
| Case(s) of Pick pocketing               | 19                | 33%     |
| Matatus with no exterior/interior Décor | 14                | 24%     |
| Unkempt operators                       | 32                | 55%     |
| Others                                  | 12                | 21%     |

The above percentages were computed by tallying all those respondents who marked a particular aspect as a disliked one, bringing this against (dividing by) the total number of respondents and then finding the percentage of this.

From the table above it is evident that majority of the commuters dislike some aspects about matatu services, since most complaints registered by commuters formed more than 55% of the responses. Reckless driving is the most disliked aspect about matatu services. Other unpopular aspects about matatu services were ranked as follows:

- Impolite and non-courteous employees (74%)
- Uncomfortable seats and overcrowded matatus were both at 62%
- Loud music and hiking of prices both got 59%

The least unpopular aspect was the presence of exterior/interior décor at 24%

Other detested aspects about matatu services were listed as

- Insecurity during service leading to Hijacking
- Bad breath of the operators

## 4.2.7 Overall assessment of matatu services

Table 4.2(vii) Analysis Commuters (overall assessment)

| Assessment | No | Percentage |
|------------|----|------------|
| V good     | 0  | 0%         |
| Good       | 6  | 10%        |
| Average    | 35 | 60%        |
| Poor       | 15 | 26%        |
| V poor     | 2  | 4%         |
| Total      | 58 | 100%       |

From the result above the study shows that most commuters (60%) evaluate matatu services as of average features. Again the overall assessment of matatu services showed that they are not excellent, registering 0%. However 4% of commuters evaluated matatu services as very poor.

## 4.3 Analysis Of Operators

### 4.3.1 Gender

Table 4.3(i) Analysis of operators (Gender)

| Gender | No<br>(Operators) | Percentage |
|--------|-------------------|------------|
| Women  | 2                 | 7%         |
| Men    | 25                | 93%        |
| Total  | 27                | 100%       |

According to the study women only formed 7% of the operators as compared to the overwhelming 93% of their counterparts (men). This confirms to the widely held belief that matatu industry is male dominated.

### 4.3.2 Education level

Table 4.3(ii) Analysis of operators (education level)

| Education  | No (Operators) | Percentage |
|------------|----------------|------------|
| Primary    | 4              | 15%        |
| Secondary  | 15             | 55%        |
| College    | 7              | 26%        |
| University | 1              | 4%         |
| Total      | 27             | 100%       |

The result of the study indicates that 74% of matatu operators have attained a level of secondary education and above. This confirms to Iraki (2000) observation that most matatu operators are nowadays of relatively higher education standards than before.

### 4.3.3 Designation of operators

Table 4.3(iii) a: Analysis Of Operators (Designation)

| Designation | No | Percent |
|-------------|----|---------|
| Owner       | 1  | 4%      |
| Manager     | 1  | 4%      |
| Operator    | 25 | 93%     |
| Total       | 27 | 100%    |

The study interviewed 93% of respondents who were actual operators, as indicated in the above table.

Table 4.3(iii) b: Analysis Of Operators (Driver/Tout)

| Operators      | No. | Percent |
|----------------|-----|---------|
| Driver         | 16  | 64%     |
| Conductor/Tout | 9   | 36%     |
| Total          | 25  | 100%    |

In turn the study indicates that more drivers (64%) responded to the interview than conductors/touts (36%). This maybe attributed to the fact that most of the time conductors are busy calling upon commuters to buy their service, while drivers have some little time at their disposal when the matatu is at a halt in the terminus.

#### 4.3.4 Complaints received from commuters

Table 4.3(iv): Analysis Of Operators (Complaints)

| Complaints                          | No (Operators) | Percentage |
|-------------------------------------|----------------|------------|
| Pricing                             | 4              | 15%        |
| Hiking of prices                    | 9              | 33%        |
| Not courteous or impolite operators | 9              | 33%        |
| Reckless driving                    | 11             | 41%        |
| Unkempt operators                   | 8              | 30%        |
| Loud music                          | 15             | 56%        |
| Uncomfortable seats                 | 5              | 19%        |
| Overcrowded matatus                 | 10             | 37%        |
| Lack of décor                       | 3              | 11%        |
| Old matatus                         | 9              | 33%        |
| Slow matatus                        | 14             | 52%        |
| None                                | 2              | 7%         |

According to operators commuters complain most about loud music in matatus (56%) almost as much about unkempt operators (52%), and complain least about lack of interior/exterior decor (11%).



However this appeared contrary to the widely held belief that commuters consider presence/lack of décor in their choice of which matatu to board.

The reason why loud music had most complaints is because it is not popular with the old or mature commuters who register more complaints to the operators than the younger group of commuters (who are relatively more comfortable with loud music).

Other complaints listed were:

- Are lack of mechanical service
- Pick pocketing

#### 4.4 Comparison between the perceptions of service providers and those of customers

Summary statistics was used to analyze data on part C of the questionnaire in order to summarize the data on the factors perceived of significance in service quality.

This part of the questionnaire had 40 variables for the two categories of the respondent. The sample of the questionnaires is attached in the appendix section.

The most important factor for the likert-scale questions was in such a way that 5 represented very important while 1 represented not at all important. The results are shown in table 4.4 (i) below

Table 4.4 (i) Means and standard deviations for both customers and matatu operators

| Variable                             | Mean<br>(Commuters) | STD  | Mean<br>(Operators) | STD  |
|--------------------------------------|---------------------|------|---------------------|------|
| Dependability                        | 4.38                | 0.97 | 4.22                | 0.85 |
| Willingness to help customers        | 4.41                | 0.92 | 4.15                | 0.72 |
| Provision of prompt service          | 4.59                | 0.59 | 3.74                | 0.76 |
| Employee knowledgeability            | 4.10                | 0.93 | 4.15                | 0.91 |
| Employee courtesy                    | 4.60                | 0.65 | 3.89                | 1.19 |
| Employee grooming                    | 4.02                | 0.83 | 4.33                | 0.92 |
| Care and attention by employee       | 3.52                | 1.03 | 4.07                | 0.87 |
| Accessibility of managers to queries | 3.26                | 1.15 | 3.07                | 1.07 |
| Credibility of service providers     | 4.10                | 0.97 | 3.81                | 1.14 |
| Availability of service              | 4.66                | 0.61 | 4.11                | 0.89 |
| Speed of action on queries           | 4.38                | 0.83 | 3.30                | 1.07 |

|   |      |      |      |      |
|---|------|------|------|------|
| Operational hours                             | 4.28 | 0.79 | 3.70 | 1.20 |
| Stability of service prices                   | 4.78 | 0.46 | 3.26 | 1.23 |
| Terminus environment                          | 4.19 | 0.83 | 3.56 | 1.25 |
| No of drop off points                         | 3.40 | 1.23 | 3.00 | 1.18 |
| Safety of ride                                | 4.81 | 0.48 | 4.22 | 0.93 |
| Comfort during ride                           | 4.28 | 1.04 | 3.96 | 1.09 |
| Extent of promotional efforts                 | 2.60 | 1.21 | 3.63 | 1.15 |
| Age of operators                              | 2.50 | 1.19 | 3.37 | 1.15 |
| Litter disposal by operators                  | 3.50 | 1.25 | 2.96 | 1.19 |
| Government accredited requirements            | 4.40 | 1.06 | 4.37 | 0.84 |
| Physical appearance of matatu                 | 3.84 | 1.07 | 3.41 | 1.19 |
| Exterior décor                                | 3.16 | 1.34 | 3.59 | 1.22 |
| Age of vehicle                                | 3.67 | 1.08 | 3.56 | 1.12 |
| Brand name for matatu                         | 2.57 | 1.37 | 3.56 | 1.09 |
| Relaxing & accommodating music in matatu      | 3.78 | 1.23 | 4.04 | 0.98 |
| Loud music in matatu                          | 2.57 | 1.55 | 2.78 | 1.19 |
| Good expertise driving                        | 4.52 | 0.90 | 4.22 | 1.12 |
| Rule observation by operators                 | 4.09 | 1.23 | 3.63 | 1.01 |
| Prompt collection of fares                    | 4.00 | 1.21 | 4.26 | 1.02 |
| Issue of ticket after payment of fare         | 2.71 | 1.38 | 3.07 | 1.52 |
| Well aerated matatu                           | 4.28 | 0.87 | 4.11 | 1.05 |
| Well lit matatu                               | 4.24 | 0.88 | 4.04 | 1.06 |
| Presence of reflectors                        | 4.14 | 1.10 | 4.30 | 0.99 |
| Presence of emergency door                    | 4.34 | 0.98 | 3.96 | 1.22 |
| Sport tyres & not worn out tyres              | 3.84 | 1.34 | 3.56 | 1.15 |
| Presence of fire extinguisher & first aid kit | 3.97 | 1.17 | 3.85 | 1.17 |
| Texture of seats                              | 3.57 | 1.19 | 3.22 | 1.28 |
| Not overcrowded matatus                       | 4.45 | 0.92 | 2.41 | 1.12 |
| Non- smoking environment                      | 4.71 | 0.59 | 3.41 | 1.42 |

Mean Score: Ranked on a 5 point – Likert

Scale with 1 = Not at all important and 5 = Very important

Source = Research data

From the table 4.4 (i) overleaf, operators perceive government accredited requirements (e.g. insurance, road license) as the most important aspect of service quality with a mean score 4.37 followed by well-groomed and well kempt employees with a mean score of 4.33. They also perceive presence of reflectors (the ones at the rear of the matatu) with a mean score of 4.30 as a relatively important factor in their of service quality variables about matatu services. The commuters on their part perceive safety of ride as the most important dimension of service quality (mean 4.81), followed by stability of service prices (mean 4.78) and again by non smoking environment (mean 4.71)

Other factors perceived fairly important by operators are prompt collection of fares and giving back of balance with a mean score of 4.26 (a reason given by some operators but not tested in the research for prompt collection of fares was because in their readiness for a backhander incase they were stopped by police officers), ability to perform the service dependably, safety of ride and good/expertise driving all with a mean score of 4.22. Commuters on the other hand perceive availability of service where and when needed (mean 4.66), courteous-friendly-polite operators (mean 4.60) and provision of prompt service (mean 4.59) as fairly important.

The results also indicate that there is concurrence between operators and commuters perceptions that loud music in the matatu (mean of 2.78 and 2.57 respectively) is not an important consideration of service quality.

The standard deviations do not show major variations between the perceptions of both category samples as shown by the responses of the operators and commuters.

Indices were calculated of two sample groups i.e. operators and commuters below. These indices were calculated by subtracting the Not important and Not all-important responses from the important and very important responses. Somewhat not important (neutral point) was ignored. The results were shown in table 4.4 (ii) overleaf:

Table 4.4 (ii) Index For Matatu Operators And Commuters

| Variable                             | VI |    | I  |    | SI |    | NI |    | NIA |    | Index |     |
|--------------------------------------|----|----|----|----|----|----|----|----|-----|----|-------|-----|
|                                      | O  | C  | O  | C  | O  | C  | O  | C  | O   | C  | O     | C   |
| Dependability                        | 12 | 34 | 10 | 18 | 4  | 2  | 1  | 2  |     | 2  | 21    | 48  |
| Willingness to help customers        | 8  | 35 | 16 | 17 | 2  | 2  | 1  | 3  |     | 1  | 23    | 48  |
| Provision of prompt service          | 3  | 37 | 16 | 18 | 6  | 3  | 2  | 0  |     | 0  | 17    | 55  |
| Employee knowledgeable               | 11 | 23 | 11 | 23 | 3  | 7  | 2  | 5  |     | 0  | 20    | 41  |
| Employee courtesy                    | 10 | 39 | 9  | 16 | 5  | 2  | 1  | 1  | 2   | 0  | 16    | 54  |
| Employee grooming                    | 15 | 18 | 8  | 25 | 2  | 13 | 2  | 2  |     | 0  | 21    | 41  |
| Care and attention by employee       | 9  | 9  | 13 | 25 | 3  | 12 | 2  | 11 |     | 1  | 20    | 22  |
| Accessibility of managers to queries | 1  | 8  | 10 | 19 | 9  | 15 | 4  | 12 | 3   | 4  | 4     | 11  |
| Credibility of service providers     | 8  | 25 | 11 | 19 | 5  | 9  | 1  | 5  | 2   | 0  | 16    | 39  |
| Availability of service              | 10 | 41 | 12 | 15 | 3  | 1  | 2  | 1  |     | 0  | 20    | 55  |
| Speed of action on queries           | 4  | 31 | 8  | 21 | 7  | 4  | 8  | 1  |     | 1  | 4     | 50  |
| Operational hours                    | 8  | 25 | 9  | 27 | 6  | 3  | 2  | 3  | 2   | 0  | 13    | 49  |
| Stability of service prices          | 4  | 46 | 10 | 11 | 4  | 1  | 7  | 0  | 2   | 0  | 5     | 57  |
| Terminus environment                 | 7  | 25 | 10 | 20 | 2  | 12 | 7  | 1  | 1   | 0  | 9     | 44  |
| No of drop off points                | 3  | 12 | 7  | 17 | 6  | 17 | 9  | 6  | 2   | 6  | -1    | 17  |
| Safety of ride                       | 13 | 49 | 9  | 7  | 3  | 2  | 2  | 0  |     | 0  | 20    | 56  |
| Comfort during ride                  | 10 | 30 | 10 | 22 | 4  | 1  | 2  | 2  | 1   | 3  | 17    | 47  |
| Extent of promotional efforts        | 7  | 3  | 9  | 12 | 6  | 16 | 4  | 13 | 1   | 14 | 11    | -12 |
| Age of operators                     | 4  | 4  | 10 | 7  | 7  | 17 | 4  | 16 | 2   | 14 | 8     | -19 |
| Litter disposal by operators         | 2  | 15 | 9  | 16 | 5  | 15 | 8  | 7  | 3   | 5  | 0     | 19  |
| Government accredited requirements   | 15 | 39 | 8  | 10 | 3  | 4  | 1  | 3  | 0   | 2  | 22    | 44  |

|   |    |    |    |    |    |    |    |    |   |    |     |     |
|---|----|----|----|----|----|----|----|----|---|----|-----|-----|
| Physical appearance of matatu                 | 4  | 19 | 12 | 19 | 4  | 14 | 5  | 4  | 2 | 2  | 9   | 32  |
| Exterior décor                                | 8  | 12 | 7  | 11 | 6  | 18 | 5  | 8  | 1 | 9  | 9   | 6   |
| Age of vehicle                                | 7  | 14 | 6  | 21 | 10 | 16 | 3  | 4  | 1 | 3  | 9   | 28  |
| Brand name for matatu                         | 5  | 8  | 12 | 7  | 3  | 10 | 7  | 18 | 0 | 15 | 10  | -18 |
| Relaxing & accommodating music in matatu      | 11 | 21 | 8  | 16 | 6  | 12 | 2  | 5  | 0 | 4  | 17  | 28  |
| Loud music in matatu                          | 2  | 10 | 7  | 8  | 4  | 10 | 11 | 7  | 3 | 23 | -5  | -12 |
| Good expertise driving                        | 14 | 40 | 9  | 12 | 2  | 4  | 0  | 0  | 2 | 2  | 21  | 50  |
| Rule observation by operators                 | 4  | 29 | 14 | 17 | 5  | 5  | 3  | 2  | 1 | 5  | 14  | 39  |
| Prompt collection of fares                    | 15 | 27 | 7  | 16 | 2  | 6  | 3  | 6  | 0 | 3  | 19  | 34  |
| Issue of ticket after payment of fare         | 7  | 8  | 5  | 9  | 3  | 14 | 7  | 12 | 5 | 15 | 0   | -10 |
| Well aerated matatu                           | 12 | 28 | 9  | 21 | 4  | 7  | 1  | 1  | 1 | 1  | 19  | 47  |
| Well lit matatu                               | 9  | 26 | 14 | 24 | 2  | 5  | 0  | 2  | 2 | 1  | 21  | 47  |
| Presence of reflectors                        | 14 | 29 | 10 | 16 | 1  | 7  | 1  | 4  | 1 | 2  | 22  | 39  |
| Presence of emergency door                    | 11 | 33 | 10 | 18 | 2  | 3  | 2  | 2  | 2 | 2  | 17  | 47  |
| Sport tyres & not worn out tyres              | 6  | 25 | 10 | 15 | 5  | 8  | 5  | 4  | 1 | 6  | 10  | 30  |
| Presence of fire extinguisher & first aid kit | 8  | 24 | 13 | 19 | 2  | 7  | 2  | 5  | 2 | 3  | 17  | 35  |
| Texture of seats                              | 4  | 14 | 10 | 21 | 4  | 10 | 6  | 10 | 3 | 3  | 5   | 22  |
| Not overcrowded matatus                       | 1  | 36 | 3  | 17 | 9  | 2  | 7  | 1  | 7 | 2  | -10 | 50  |
| Non- smoking environment                      | 7  | 45 | 9  | 9  | 3  | 4  | 4  | 0  | 4 | 0  | 8   | 54  |

Source: Research data

### KEY

VI = Very important

I = Important

SI = Somewhat important

NI = Not important

NAI = Not at all important

O = Operators

C = Commuters

From the table 4.4 (ii) above, it is observed that the operators perceive provision of prompt service (index 23), government accredited requirements-insurance, road license and presence of road reflectors (both with indices of 22) as the most important variables of service quality. The commuters perceive stability of service prices (index 57), safety of ride (index 56), provision of prompt service and availability of service where and when needed (both with indices 55) as of paramount importance in the provision of quality service.

Other variables perceived important by operators include ability to perform service dependably, well groomed/well kempt operators, good/expertise driving and well-lit matatu during night ride. The commuters on their part perceive courteous-polite-friendly operators, non-smoking environment in the matatu and not overcrowded matatus as a true representation of service quality about matatu services.

The operators responded in the affirmative that they do not perceive not-overcrowded matatus as an important variable of service quality (because their reasoning was the more extra commuters above normal capacity the more is their take home away from the normal allowance).

Also the operators do not perceive loud music as important in evaluation of service quality. Lastly operators perceive having numerous drop off points as not important in quality evaluation of matatu services since they booked for picking or collecting commuters away from the designated points.

The commuters perceive not-overcrowded matatus (with index 50) as a relatively important aspect of service quality in matatu services. Numerous drop-off points are also a relatively important factor to the commuters in their evaluation (with index 17). However there is a consensus between operators and commuters about the aspect of loud music since commuters also do not regard it as important in their evaluation of matatu service (index of -17).

Table 4.4 (ii) shows that brand name for matatus do not form an important criterion of perception of service quality in the commuters (with index -18) while, operators perceive it otherwise with an index of 10.

### 3.1 Introduction

The results also indicates that operators perceive extent of promotional efforts as important (index 11) while commuter commuters regard it a s not important (index - 12) in evaluation of service quality.

The majority of indexes for commuters range from 20 and above which shows that most commuters' perceptions of service quality are high.

### 5.2 Discussion and Conclusion

From the analysis it was apparent that the market vehicle is largely male dominated. According to the study women only formed 7% of the operators as compared to the overwhelming 93% of their counterparts (men). This compares well with other studies elsewhere (Sidd 1987 and Kapte 1992). This shows that matatus in Kenya are a male phenomenon and come up as an evidence of self education vehicle which were the major mode of transport in Kenya that were provided in 1970s.

The study also established that most matatu operators are knowledgeable of relatively higher education standards than believed. The study indicated that 70% of matatu operators have studied a level of secondary education and above. This could be attributed to higher unemployment rate in the economy which has led to. Only 13% of matatu operators left school at primary school level and 33% at secondary school level. This supports Ireri's (2000) observation that matatu operators are well educated.

The nature of the matatu operating environment has changed much from the time Apple (1970), Doshi (1980), Kapte (1992) and Ombere (1987) conducted their studies.

## **CHAPTER FIVE: DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

In an industry that has seen a momentous growth in the economy, more intensifying competition and where customer loyalty is not guaranteed, matatus have been forced to develop other service offerings and repackage their service apart from the basic transportation service, in-order to maintain a consistent flow of commuters. Matatu industry is a low margin sector, whereby for service providers to gain higher returns, they have to ensure that they have many commuters who board their vehicles.

Service quality has therefore become a necessary evil in order to appeal to customer to encourage Patronage and repeat purchases.

### **5.2 Discussions and Conclusion**

From the analysis it was apparent that the matatu industry is largely male dominated, According to the study women only formed 7% of the operators as compared to the overwhelming 93% of their counterparts (men); this concurs with other studies (Osundwa 1987 and Kapila 1982). This shows that matatus in Kenya are a recent phenomenon and come up as an antithesis of self selection vehicles which were fore runners of matatus in Kenya that were prevalent in 1970s.

The study also established that most matatu operators are nowadays of relatively higher education standards than before. The study indicated that 74% of matatu operators have attained a level of secondary education and above. This could be attributed to higher unemployment rates in the economy today than then. Only 15% of matatu operators left school at primary school level and 55% at secondary school level. This supports Iraki's (2000) observation about highly educated matatu operators.

The situation of the matatu-operating environment has changed much from the time Ayoob (1976), Darabi (1982), Kapila (1982) and Osundwa (1987) conducted their studies.



Today more complaints are registered than then. The results of this study indicate that commuters complain most about loud music in matatus (56%) almost as much about unkempt operators (52%), and complain least about lack of interior/exterior decor (11%). Other complaints that were registered about matatu services are their pricing system, hiking of prices, not-courteous/impolite operators, reckless driving, unkempt operators, overcrowded matatus old matatus, slow matatus and uncomfortable seats.

From oral interviews with operators, it was established that the competition has increased prompting them to repackage their service by including entertainment gadgets like Dvd players, hi-fi music systems, free services to loyal customers and lower price rates by some of the matatu operators who do not report to the manned terminus.

On the subject of commuters' gender it can be concluded that women form a larger percentage of commuters in the sample studied. This can be attributed to the fact that women are more in Kenyan population than men. This confirms a widely held belief that in our economy fewer women ride in private cars than men.

On the subject of commuter age, since there was no respondent below 18 years of age (the research being done during school hours), this might have influenced the dimension of commuters disliking loud music in matatus which is popular with the under eighteens.

Commuters evaluated Matatu services averagely as shown in table 4.2 (vii). Again the overall assessment of matatu services showed that they are not excellent, registering 0% in the same table. However 4% of commuters evaluated matatu services as very poor.

Oral interviews conducted reveal that most matatus rarely use customer research in their quest of monitoring service quality performance, despite their indication that they monitor service quality. Matatu operators, from these oral interviews, usually benchmark their competitors by monitoring on what they are doing and then copy or modify what they are doing and implement it in their matatus.

From the table 4.4 (3), it is observed that the operators perceive provision of prompt That majority of matatus monitor what their competitors are offering their commuters through mystery shopping. These interviews also established that majority of the matatu operators do not conduct any consumer research to establish the changes of preferences, and needs of the commuters, but only monitor their competitors' offerings.

On the set objectives of the study, it can be concluded that operators to a large extent perceive service quality differently as compared with the commuters. The operators usually perceives functional dimensions and the availability of the service as important while the commuters on top of availability of service, also perceive the human dimensions (for example courteous, friendly and helpful employees) as important dimensions of service quality.

A grand mean of 4 was obtained on commuter expectations, which means that matatu users expected the quality of matatu services to be 'good'. However a grand mean of 3 was achieved on what operators regard as quality, which means that matatu service providers perceive their services top be somewhat good. This leads us to the conclusion for our objective that matatu operators' perception of quality of their services is below the expectations of commuters.

This is an indication of a gap, hence some dissatisfaction in the services provided.

Along the same note, the study reveals that there is a consensus between the operators and commuters about the aspect of loud music since they both disregard it as important in their evaluation of matatu service. The whole irony is that operators say that they put loud music because commuters ask for it, and also through observation commuters "fight" for a space in these loud music matatus while on the other hand commuters vote loud music out. Could this be because matatus with loud music are assumed to be in good condition mechanically, move very fast and do not waste time on traffic jams?

From the table 4.4 (ii), it is observed that the operators perceive provision of prompt service (index 23), government accredited requirements-insurance, road license and presence of road reflectors (both with indices of 22) as the most important variables of service quality. The commuters perceive stability of service prices (index 57), safety of ride (index 56), provision of prompt service and availability of service where and when needed (both with indices 55) as of paramount importance in the provision of quality service.

Other variables perceived important by operators include ability to perform service dependably, well groomed/well kempt operators, good/expertise driving and well-lit matatu during night ride. The commuters on their part perceive courteous-polite-friendly operators, non-smoking environment in the matatu and not overcrowded matatus as a true representation of service quality about matatu services.

The operators responded in the affirmative that they do not perceive not-overcrowded matatus as an important variable of service quality (because their reasoning was- the more the extra commuters above normal capacity the more is their take home - away from their normal allowance). Also the operators do not perceive loud music as important in evaluation of service quality. Lastly operators perceive having numerous drop off points as not important in quality evaluation of matatu services since they booked for picking or collecting commuters away from the designated points.

The commuters perceive not-overcrowded matatus (with index 50) as a relatively important aspect of service quality in matatu services. Numerous drop-off points are also a relatively important factor to the commuters in their evaluation (with index 17). However there consensus is a between operators and commuters about the aspect of loud music since commuters also do not regard it as important in their evaluation of matatu service (index of -17). The whole irony is that operators say that they put loud music because commuters ask for it, and also through observation commuters "fight" for a space in these loud music matatus while on the other hand commuters vote loud music out. Could this be because matatus with loud music are assumed to be in good condition mechanically, move very fast and do not waste time on traffic jams?

Table 4.4(ii) shows that brand name for matatus do not form an important criterion of perception of service quality in the commuters while; operators perceive it otherwise.

The results also indicates that operators perceive extent of promotional efforts as important while commuter commuters regard it a s not important in evaluation of service quality.

Other aspects perceived as important in evaluation of service quality are:

- Credibility (good reputation) of service providers
- Physical appearance of the matatu, for instance, dent – free,
- Rule observation by matatu touts and drivers,
- Presence of reflectors and presence of fire extinguisher and first aid kit.

Some of the factors that were perceived as not important by commuters are:

- Age of operators, e.g. young/youthful or mature/fairly old.
- Exterior décor e.g. colors of matatu

On the other hand, operators regard the following as of paramount importance in service provision:

- Provision of prompt service
- Credibility (good reputation) of service providers
- Comfort during ride
- Relaxing & accommodating music in the matatu
- Well aerated matatu/ 'opening' windows

They however do not regard the following aspects as important in quality provision

- Proximity & accessibility of managers for queries
- Fast action on queries or complaints
- Stability of service prices
- Appropriate litter disposal by operators
- Texture of seats

Points of consensus include:

Where both matatu operators and commuters disregard issue of ticket after payment of fare as an important quality aspect, while they both regard presence of fire extinguisher and first aid kit as an important quality aspect.

The majority of indexes for commuters range from 20 and above which shows that most commuters' perceptions of service quality are high.

### 5.3 Recommendations

From the findings, it is clear that majority of matatu operators do not target any given customers. The operators need to target their services to different customers through developing suitable service offerings to different customer's categories based on income, age, level of education and other relevant bases of segmentation in order to encourage customer loyalty which will lead to long term mutual and profitable relationships.

It is also recommended that matatu operators should try to improve their complaints handling channels, since as it is now, the operators do not handle and act on complaints. The operators should introduce customer service booths within the terminus vicinity to handle customers' problems and queries. This should send signals to the customers that the matatu operators care for them which would create favorable perceptions in the mind of the customer resulting in consistent repeat use of such services.

The operators should also put emphasis on customers' research in order to establish the needs and preferences of their customers, which will aid them in improving their services offerings so that they can match customer expectations. The matatu operators should emphasize on their employees being more responsive to customers' queries.

Matatu operators should discourage loading beyond the normal passenger capacity, smoking in the vehicles should be stopped and probably a legal ban placed on this.

Loud music should not be played and instead accommodating music should be in place to relax the commuters.

During drop and pick situations operators should exercise utmost care and at designated points to prevent unnecessary accidents. Commuters on the other hand should endeavor to board matatus at the designated points (stage point).

Police officers should enhance their random Matatu checks for government-accredited requirements like insurance, road license and operator license.

#### 5.4 Limitations of the study

The results of this study should be interpreted in the context of a number of study limitations:

1. The study did not consider a number of factors, which influence perceptions, among them, income, level of education and other variables that can be used to segment customers.
2. The small sample size of matatu operators as compared to sample of commuters could have limited confidence in the results and this might limit generalizations to other industries and situations.
- ✓ 3. The study relied on judgments of both commuters and service providers' perception of service quality, which are subjective to various cognitive biases, which might have had an effect on the results.
4. The analysis of the matatu sector was done devoid of any consideration of classification criteria such as location, size; number of route/changes, and the conclusions drawn therefore may not necessarily reflect a true and fair reflection of all the matatus services in the industry.
- ✓ 5. The data was collected at one point in time, which could have biased the results, for instance the way the hour of research excluded those in school, colleges or even at work. Possibly the data could have been more helpful if it was collected at two or more points in time and then compared to be able to have more accurate and objective information for conclusions and generalizations.

## 5.5 Suggestions for future research

The aim of this study was to compare perceptions and opinions of both service providers and customers about service quality in the matatu industry in Nairobi.

The researcher suggest that a future research could be done which concentrates on classifying customers in terms of their income, occupation while also classifying service providers in terms of size and any other objective measure, in order to establish if there exists any significant differences.

A comparative study should be carried out with other systems of road transport like the buses providing town service transport (KBS), metro shuttle, long distance public service vehicles, or, other modes of transport like rail transport.

Studies should be carried out on perceived quality of service in other industries, such as banking and other hospitality industries and other hospitality industries.

Research is also called for into the actual attitude determinants for matatu services. Can the various service components be aggregated and be claimed to be the ones that actually determines the attitude of commuters towards matatus?

On a general note, the areas of consumer satisfaction with respect to services are still largely an unexplored area. Conceptual frameworks that take into considerations the unique nature of services should be developed to offer practitioners a service-oriented basis for marketing planning and control.

## REFERENCES

- American Marketing Association (AMA): "A glossary of marketing terms", committee on definitions of the American Marketing Association, Chicago p.21. , 1960
- Ayoob R.O: "Length of journey and choice of mode of travel to work. A case study of Dar-es-salaam city", unpublished MA thesis, University of Nairobi. , 1976
- Baker M.K.: Marketing ,3<sup>rd</sup> Edition Butterworth Heinman Limited. , 1994
- Bateson J.E.G "Do we need marketing in marketing consumer services," new insight Cambridge, MA, Marketing Science Institute, Report number 77-115. 1977
- Berry L.L. "Service Marketing is different", Business Vol.30. (May - June) pp.24 29. 1980
- Blois K.J, "the marketing of service: An Approach" European Journal of marketing vol. 8: No. 2. , 1978
- Boom B.H. and Bitner M.J. "Marketing strategies and organisational structures for service firms, in marketing of services," Donnelly and W. George edition, Chicago, America Marketing. , 1989
- Canar: Motor insurance Theory and Practice, London, Witherby and company. 1979
- Chase R.B: " Where does a customer fit in a service operation?" Harvard Business Review Vol. 56, September -October, 1999.
- Christopher, M., Payne and Ballantayne Relationship marketing consumer and industrial buying behaviour, Arch G. Woodside, Jaydish N., Sheth and Peter D. Bennett edition, New York: North Holland Publishing company PP. 267 - 86. , 1997
- Churchill, G.A. JR., Marketing Research: Methodological Foundations, Illinois the Dryder Press PP. 228 - 231. 1979
- Converse et al: Elements of Marketing, London: Pitman, 6<sup>th</sup> edition. 1958
- Cooper, D.R. and Emory, C.W. Business Research Methods, McGraw Hill Cos. Inc London. 1995
- Crosby P.B. Quality is free New York, New American Library, 1979
- Daniel, W.W. and Terrell J.C. Business Statistics (Beston, Houston Miffin), P. 97. 1995
- Garvin D.A. "Quality on the line," Harvard business review, September - October, 1983
- Groorooos C.: "A service oriented approach to marketing of services". European journal of Marketing, number 8., 1978
- Gronroos C., " A service Quality Model and its marketing implications", European journal of marketing, Vol.18, No.4. , 1982



- Iraki X.N. "Matatu industry has shown way on what industrialization is all about", Unpublished University of Nairobi article, Nairobi. 2000
- Jaleha A.: "Motor vehicle thefts. Implications on the underwriting practice in Kenya", 1989-1992, unpublished MBA project, University of Nairobi, Nairobi. 1993
- Jarabi, Obonyo Ben "Intra-urban mobility and urban transportation. A case study of Nairobi city, Kenya" Unpublished MSC thesis, University of Nairobi, Nairobi. 1982
- Jacoby, J. Olson "Service quality and its implications for future research" in Journal of marketing PP. 49, 41 – 50. Lexington Books, PP. 139 – 54. 1999
- Laird, D.A. "How the consumer Estimates Quality by Subconscious sensory impression", Journal of Applied Psychology, PP.16 (2) 241 – 6. 1988
- Kapila, Sunita, Manundu and Lamba: "The matatu mode of public transport in metropolitan Nairobi", Mazingira Institute, Nairobi. 1982
- Kibera Francis and B Waruingi: Fundamentals of marketing; An African perspective KLB Nairobi, 1998
- Kotler P. Marketing Management: Analysis, planning and control (5<sup>th</sup> ed), Delhi, Prentice-Hall. 1985
- Kotler, P. Marketing Management: Analysis planning implementation land control 9<sup>th</sup> edition. New Delhi; prentice Hall.inc. 1999
- Langat J.K. "Developing a computer based information system using structured methodology. The case of Obuya Express", unpublished MBA project, University of Nairobi, Nairobi. 1996
- Lentinen U. and Lentinen "Service quality, a study of quality dimensions" unpublished working paper, Helsinki service management institute, Finland O.Y. 1982
- Lovelock C.H Services Marketing: Text, cases and readings New Jersey, Prentice Hall. 1984
- Lovelock, C.H. Services Marketing, New Jersey, Prentice Hall, 3<sup>rd</sup> edition. 1996
- Masinde C.K.M "Perceived Quality of service: The case of Kenya Airways", unpublished MBA project, University of Nairobi, Nairobi. 1986
- Mugo, A. "Determinants of service quality among the internet service providers in Kenya", unpublished MBA project, United States International University, Nairobi. 2000
- Mukiri, P.M. "Perceived service quality: the case of mobile service users", unpublished MBA project, University of Nairobi, Nairobi. 2001
- Mwendar, A.M. "perceived Quality of port services: the case of Kenya Ports Authority" unpublished MBA project, University of Nairobi, Nairobi. 1987
- Majtengi "Scourge without end" Daily Nation, January, 1993.page 16. 1993

- Ndegwa, R. M "Analysis of customer service offered by Kenya's commercial banks", unpublished University of Nairobi thesis, Nairobi. 1996
- Ngatia, E.M "A comparative study of service Quality in the Retailing industry" unpublished MBA project, university of Nairobi, Nairobi. 2000
- Ngesa, M.A. "A Comparative study of the perceptions of bank customers and bank management of the importance of retail commercial banking activities", unpublished MA thesis, University of Nairobi, Nairobi. 1990
- Okatch F. "Secrets to winning clients confidence" Sokoni, journal of marketing society of Kenya. Fourth quarter. 1993
- Okatch F. "Services for you: No free lunches here." Fast African market trends June/July 2000
- Olsharvsky, R., and J.A. Milles "Consumer expectations, product performance and perceived product quality", Journal of marketing research, Vol. 9 (February 1972) PP. 19 - 21. 1998
- Olson J.C. and Jacoby J. "Cue utilisation in the quality perception of service Quality, Theory and Practice", Dolan T. Rust and Richard L. Oliver thousand oaks, C.A. Sage. 2000
- Omondi G. "A study of the operations of the Kenya motor insurance pool" unpublished MBA project, University of Nairobi. Nairobi. 1988
- Osundwa, K.C. "Choice of commuting modes in an urban sector. A case study of Nairobi city", unpublished MA in economics thesis, University of Nairobi, Nairobi. 1987
- Parasuraman A., Zeithaml V.A and Berry L. "A conceptual model of service quality of its implications for future research" Journal of marketing, 49, fall. 1985
- Regan, W.J. "The Service Revolution", Journal of Marketing, Vol.30 October pp.32-36. 1966
- Rust, R. T, Zahorik, A. J and Keiningham, T.L. Service marketing, New York: Harper Collins College publishers. 1996
- Sasser, W.E., "Matching demand and supply in service Industries", Harvard Business Review, Vol. 54 PP. 133 - 140. Nov - December 1976
- Schiffman, C.G. and Kanuk, L.L. Consumer Behavior 6<sup>th</sup> edition India, Prentice hall inc. 1991
- Second United Nations Transport and Communications Decade (UNCTACDA II). "Roads sub-sector working group, strategy paper". December 1, 1990.
- Shostack, Lynn "Breaking free from product marketing" Journal of marketing, vol. 41, pp. 73-80. 1977
- Smith R.A. and House and Houston M.J. "Script based evaluation of satisfaction with service in emerging perspectives on service marketing," Chicago, America marketing. 1982

## Appendices

Sokoni Journal of marketing society of Kenya , volume one. First quarter 1996

Stanton W.J. Fundamentals of Marketing. Tokyo, McGraw-Hill. 1981

Swan, J. E and Combs, L.T: "Product performance consumer satisfaction: A new concept," Journal of marketing. April, pp 25-33. 1977

'Transport crisis in Nairobi" Management, volume 13, number 1, January-February. 1996.

World Bank. "Road Transport Research, road monitoring for maintenance management." Volume 1, manual for developing countries. 1995

Zeithaml Valarie. "Consumer perceptions of price quality and value Means end Model, Synthesis and Evidence" Journal of marketing .3<sup>rd</sup> July. 1988

• 30 to 34 years

• 35 to 39 years

• Above 40 years

1. What is your gender? (100)

Male

Female

2. What is your marital status?

Single

Married

3. Please indicate your education level

• Primary

• Secondary

• College

• University

4. How often do you use the service?

• Daily

• Weekly

• Monthly

• Quarterly

• Annually

• Other

5. How satisfied are you with the service?

• Very satisfied

• Satisfied

## Appendices

### QUESTIONNAIRE FOR COMMUTERS.

---

{Please help to answer the following questions}.

1. What is your name? (Optional).....
2. Where are you located? (Estate).....
3. What is your occupation?.....
4. Please tick the age bracket in which you fall;
  - Below 18 years [ ]
  - 19 to 24 years [ ]
  - 25 to 29 years [ ]
  - 30 to 34 years [ ]
  - 35 to 39 years [ ]
  - Above 40 years [ ]
5. What is your gender? (Tick)
  - Male [ ] Female [ ]
6. Please indicate your marital status;
  - Single [ ] Married [ ]
7. Please indicate your education level
  - Primary [ ]
  - Secondary [ ]
  - College [ ]
  - University [ ]

#### PART B

1. What is your route to town? (Route number).....
2. What means of transport do you use to town?  
[ ] public [ ] private [ ] other (specify).....
3. Have you ever used Matatu to travel to town? [ ] Yes [ ] No  
(Please proceed to the other questions only if the answer to 3 above is yes)
4. Do you still use Matatu to travel to town? [ ] Yes [ ] No
5. How often do you travel to town?
  - More than once in a day [ ]
  - Everyday [ ]

- Twice a week [ ]
- Thrice a week [ ]
- Any other (specify) -----

6. Is there anything you dislike in Matatu services? [ ] Yes [ ] No

If yes, what are some of these reasons? (Please tick all that apply)

- Hiking of prices [ ]
- Unprompt return of change [ ]
- Impolite & not courteous operators [ ]
- Wreck less driving [ ]
- Loud music [ ]
- Uncomfortable seats [ ]
- Over loaded matatus [ ]
- Case of pick pocketing always [ ]
- Matatus with no exterior inferior décor [ ]
- Unkempt operators [ ]
- Other (please specify) -----

7. What is your overall assessment of services provided by matatus?

- Excellent [ ]
- Very good [ ]
- Average [ ]
- Poor [ ]
- Very poor [ ]

### PART C

Please indicate the extent to which each of the attributes are important to you in evaluation of services offered by Matatus (Tick as appropriate).

|    |  | Very Important | Important | Somewhat Important | Not Important | Not Important at all |
|----|--|----------------|-----------|--------------------|---------------|----------------------|
| 1. | Ability to perform the provided service dependably (Advice Customers Properly) |                |           |                    |               |                      |
| 2. | Willingness to help customers  |                |           |                    |               |                      |
| 3. | Provision of prompt service  |                |           |                    |               |                      |
| 4. | Knowledgeable employee on services they offer                                  |                |           |                    |               |                      |
| 5. | Courteous, friendly, polite employees  |                |           |                    |               |                      |
| 6. | Well groomed\ well kempt employees.  |                |           |                    |               |                      |

|     |   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
| 7.  | Caring and individualised attention.                            |  |  |  |  |  |
| 8.  | Proximity & accessibility of managers for queries.              |  |  |  |  |  |
| 9.  | Credibility (good reputation) of service providers.             |  |  |  |  |  |
| 10. | Availability of service when and where needed.                  |  |  |  |  |  |
| 11. | Fast action on queries or complaints                            |  |  |  |  |  |
| 12. | Early morning/ late operational hours                           |  |  |  |  |  |
| 13. | Stability of service prices                                     |  |  |  |  |  |
| 14. | Terminus environment  |  |  |  |  |  |
| 15. | Numerous drop off points  |  |  |  |  |  |
| 16. | Safety of ride  |  |  |  |  |  |
| 17. | Comfort during the ride   |  |  |  |  |  |
| 18. | Extent of promotional efforts                                   |  |  |  |  |  |
| 19. | Age of operators e.g. young/ youthful or mature/fairly old.     |  |  |  |  |  |
| 20. | Appropriate disposal of litter by operators                     |  |  |  |  |  |
| 21. | Government accredited requirements e.g. insurance, road licence |  |  |  |  |  |
| 22. | Physical appearance of the Matatu e.g. dent free                |  |  |  |  |  |
| 23. | Exterior Décor e.g. colours of matatu                           |  |  |  |  |  |
| 24. | Age of vehicle e.g. newly registered                            |  |  |  |  |  |
| 25. | Brand Name for Matatu   |  |  |  |  |  |
| 26. | Relaxing and accommodating music in the Matatu                  |  |  |  |  |  |
| 27. | Loud music in the Matatu  |  |  |  |  |  |
| 28. | Good expertise driving  |  |  |  |  |  |
| 29. | Rule observation by touts and drivers                           |  |  |  |  |  |
| 30. | Prompt collection of fares and prompt giving back of balance    |  |  |  |  |  |
| 31. | Issue of ticket after payment of fare                           |  |  |  |  |  |
| 32. | Well aerated Matatu/'Opening' Windows                           |  |  |  |  |  |
| 33. | Well lit Matatu during night ride                               |  |  |  |  |  |
| 34. | Presence of reflectors  |  |  |  |  |  |
| 35. | Presence of emergency door                                      |  |  |  |  |  |
| 36. | Sports tyres and rims or not worn-out tyres                     |  |  |  |  |  |
| 37. | Presence of Fire extinguisher and First Aid kit                 |  |  |  |  |  |
| 38. | Texture of seats  |  |  |  |  |  |
| 39. | Not-crowded Matatus   |  |  |  |  |  |
| 40. | Non-smoking environment   |  |  |  |  |  |

**Thank you for your cooperation**

## QUESTIONNAIRE FOR OPERATORS

**{Please help answer the following questions}**

1. What is your name? [Optional].....
2. What is your route of operations?.....
3. Please indicate your education level
  - Primary [ ]
  - Secondary [ ]
  - College [ ]
  - University [ ]
  - Other (Specify).....
4. a). Please indicate your designation  
Owner [ ] Manager [ ] Operator [ ]  
b). If your answer to 4[a] is operator, please specify role  
Driver [ ] Tout [ ]
5. Do commuters complain on anything about the service you offer to them?  
Yes [ ] No [ ]
6. If the answer to (5) above is yes, what are some of the reasons why commuters boarding your Matatu complain? [Please tick all that apply]
  - i. Pricing [ ]
  - ii. Hiking of prices [ ]
  - iii. Not courteous or impolite operators [ ]
  - iv. Reckless driving [ ]
  - v. Unkempt operators [ ]
  - vi. Loud music [ ]
  - vii. Uncomfortable seats [ ]
  - viii. Overcrowded Matatus [ ]
  - ix. Lack of exterior\interior décor [ ]
  - x. Old Matatus [ ]
  - xi. Slow Matatus [ ]
  - xii. None [ ]
  - xiii. Other [specify].....

7. Please indicate by putting a tick in the appropriate box, the extent to which you agree or disagree with the following statements about what you regard as quality in Matatu services.

|     |  | Strongly Agree | Agree | Neither Agree nor Disagree | Disagree | Strongly Disagree |
|-----|--|----------------|-------|----------------------------|----------|-------------------|
| 1.  | Ability to perform the provided service dependably (Advice Customers Properly) |                |       |                            |          |                   |
| 2.  | Willingness to help customers  |                |       |                            |          |                   |
| 3.  | Provision of prompt service  |                |       |                            |          |                   |
| 4.  | Knowledgeable employee on services they offer                                  |                |       |                            |          |                   |
| 5.  | Courteous, friendly, polite employees  |                |       |                            |          |                   |
| 6.  | Well groomed\ well kempt employees.  |                |       |                            |          |                   |
| 7.  | Caring and individualised attention.   |                |       |                            |          |                   |
| 8.  | Proximity& accessibility of managers for queries.                              |                |       |                            |          |                   |
| 9.  | Credibility (good reputation) of service providers.                            |                |       |                            |          |                   |
| 10. | Availability of service when and where needed.                                 |                |       |                            |          |                   |
| 11. | Fast action on queries or complaints   |                |       |                            |          |                   |
| 12. | Early morning/ late operational hours  |                |       |                            |          |                   |
| 13. | Stability of service prices  |                |       |                            |          |                   |
| 14. | Terminus environment   |                |       |                            |          |                   |
| 15. | Numerous drop off points   |                |       |                            |          |                   |
| 16. | Safety of ride   |                |       |                            |          |                   |
| 17. | Comfort during the ride  |                |       |                            |          |                   |
| 18. | Extent of promotional efforts  |                |       |                            |          |                   |
| 19. | Age of operators e.g. young/ youthful or mature/fairly old.                    |                |       |                            |          |                   |



|     |   |  |  |  |  |  |
|-----|---|--|--|--|--|--|
| 20. | Appropriate disposal of litter by operators                     |  |  |  |  |  |
| 21. | Government accredited requirements e.g. insurance, road licence |  |  |  |  |  |
| 22. | Physical appearance of the Matatu e.g. dent free                |  |  |  |  |  |
| 23. | Exterior Décor e.g. colours of matatu                           |  |  |  |  |  |
| 24. | Age of vehicle e.g. newly registered                            |  |  |  |  |  |
| 25. | Brand Name for Matatu   |  |  |  |  |  |
| 26. | Relaxing and accommodating music in the Matatu                  |  |  |  |  |  |
| 27. | Loud music in the Matatu  |  |  |  |  |  |
| 28. | Good expertise driving  |  |  |  |  |  |
| 29. | Rule observation by touts and drivers                           |  |  |  |  |  |
| 30. | Prompt collection of fares and prompt giving back of balance    |  |  |  |  |  |
| 31. | Issue of ticket after payment of fare                           |  |  |  |  |  |
| 32. | Well aerated Matatu/'Opening' Windows                           |  |  |  |  |  |
| 33. | Well lit Matatu during night ride                               |  |  |  |  |  |
| 34. | Presence of reflectors  |  |  |  |  |  |
| 35. | Presence of emergency door                                      |  |  |  |  |  |
| 36. | Sports tyres and rims or not worn-out tyres                     |  |  |  |  |  |
| 37. | Presence of Fire extinguisher and First Aid kit                 |  |  |  |  |  |
| 38. | Texture of seats  |  |  |  |  |  |
| 39. | Not-crowded Matatus   |  |  |  |  |  |
| 40. | Non-smoking environment   |  |  |  |  |  |

**Thank you for your cooperation.**

## SAMPLE FRAME

|     | ROUTE NUMBER | ROUTE NAME          |
|-----|--------------|---------------------|
| 1.  | 2            | Dagoretti           |
| 2.  | 4            | Easleigh            |
| 3.  | 4            | Riruta              |
| 4.  | 6            | Ngara               |
| 5.  | 7            | Jericho/Gikomba     |
| 6.  | 8b           | Jericho/Pumwani     |
| 7.  | 8-42         | Kibera              |
| 8.  | 9            | Easleigh/Pangani    |
| 9.  | 10           | Maringo /Jogoo Road |
| 10. | 11           | South B             |
| 11. | 12           | South C             |
| 12. | 14           | Madaraka            |
| 13. | 14           | Huruma              |
| 14. | 15           | Langata             |
| 15. | 16           | HighRise            |
| 16. | 17           | Ruai                |
| 17. | 17a          | Kasarani            |
| 18. | 17b          | Kayole              |
| 19. | 17c          | Njiru               |
| 20. | 17d          | Njiru/Ruai          |
| 21. | 18           | Gikomba             |
| 22. | 19c          | Komarock            |
| 23. | 19-60        | Umoja II - Kayole   |
| 24. | 22           | Uthiru              |
| 25. | 23           | Kangemi             |
| 26. | 23           | Outer Ring          |
| 27. | 24           | Karen               |
| 28. | 25           | Babadogo            |
| 29. | 26           | Kariobangi          |
| 30. | 29-30        | Mathare             |
| 31. | 30           | Kinoo               |
| 32. | 32           | Dandora             |
| 33. | 33           | Embakasi            |
| 34. | 33           | IDH                 |
| 35. | 33b          | Donholm             |
| 36. | 33c          | Savannah            |
| 37. | 34           | Greenfeilds         |
| 38. | 35           | Tena                |
| 39. | 35-60        | Umoja I             |
| 40. | 36           | Dandora             |
| 41. | 37           | Dandora/Outer Ring  |
| 42. | 39           | Ruai                |
| 43. | 44           | Kahawa West         |
| 44. | 45           | Kahawa Sukari       |

|     |     |                  |
|-----|-----|------------------|
| 45. | 46  | Kawangware       |
| 46. | 48  | Lavington        |
| 47. | 48  | Kileleshwa       |
| 48. | 53  | Thome            |
| 49. | 56  | Kanugaga         |
| 50. | 58  | BuruBuru         |
| 51. | 100 | Kiambu           |
| 52. | 102 | Kikuyu           |
| 53. | 105 | Kikuyu           |
| 54. | 106 | Banana           |
| 55. | 107 | Ndenderu         |
| 56. | 108 | Gachie           |
| 57. | 110 | Athi River       |
| 58. | 111 | Ngong            |
| 59. | 116 | Tigoni           |
| 60. | 117 | Nazareth         |
| 61. | 118 | Kabete - Wangige |
| 62. | 119 | Mwimuto- Wangige |
| 63. | 120 | Kiambu           |
| 64. | 125 | Rongai           |
| 65. | 126 | Kiserian         |
| 66. | 129 | Gikuni -Mwimuto  |
| 67. | 131 | Kari             |
| 68. | 145 | Ruiru            |

*Source: Matatu Welfare Association (M.W.A) office.*

## Appendix 1

| Variable | Range<br>(Operators) | Variance | Range<br>(Commuters) | Variance |
|----------|----------------------|----------|----------------------|----------|
| 1        | 3                    | 0.72     | 4                    | 0.97     |
| 2        | 3                    | 0.52     | 4                    | 0.92     |
| 3        | 3                    | 0.58     | 2                    | 0.59     |
| 4        | 3                    | 0.82     | 3                    | 0.93     |
| 5        | 4                    | 1.41     | 3                    | 0.65     |
| 6        | 3                    | 0.85     | 3                    | 0.83     |
| 7        | 3                    | 0.76     | 4                    | 1.03     |
| 8        | 4                    | 1.15     | 4                    | 1.15     |
| 9        | 4                    | 1.31     | 3                    | 0.97     |
| 10       | 3                    | 0.79     | 3                    | 0.61     |
| 11       | 3                    | 1.14     | 4                    | 0.83     |
| 12       | 4                    | 1.45     | 3                    | 0.79     |
| 13       | 4                    | 1.51     | 2                    | 0.46     |
| 14       | 4                    | 1.56     | 3                    | 0.83     |
| 15       | 4                    | 1.38     | 4                    | 1.23     |
| 16       | 3                    | 0.87     | 2                    | 0.48     |
| 17       | 4                    | 1.19     | 4                    | 1.04     |
| 18       | 4                    | 1.32     | 4                    | 1.21     |
| 19       | 4                    | 1.32     | 4                    | 1.19     |
| 20       | 4                    | 1.42     | 4                    | 1.25     |
| 21       | 3                    | 0.70     | 4                    | 1.06     |
| 22       | 4                    | 1.40     | 4                    | 1.07     |
| 23       | 4                    | 1.48     | 4                    | 1.34     |
| 24       | 4                    | 1.26     | 4                    | 1.08     |
| 25       | 3                    | 1.18     | 4                    | 1.37     |
| 26       | 3                    | 0.96     | 4                    | 1.23     |
| 27       | 4                    | 1.41     | 4                    | 1.55     |
| 28       | 4                    | 1.26     | 4                    | 0.90     |
| 29       | 4                    | 1.01     | 4                    | 1.23     |
| 30       | 3                    | 1.05     | 4                    | 1.21     |
| 31       | 4                    | 2.30     | 4                    | 1.38     |
| 32       | 4                    | 1.10     | 4                    | 0.87     |
| 33       | 4                    | 1.11     | 4                    | 0.88     |

UNIVERSITY OF NAHOL  
LOWER KULETE LIBRARY

|    |   |      |   |      |
|----|---|------|---|------|
| 34 | 4 | 0.99 | 4 | 1.10 |
| 35 | 4 | 1.50 | 4 | 0.98 |
| 36 | 4 | 1.33 | 4 | 1.34 |
| 37 | 4 | 1.36 | 4 | 1.17 |
| 38 | 4 | 1.64 | 4 | 1.19 |
| 39 | 4 | 1.25 | 4 | 0.92 |
| 40 | 4 | 2.02 | 2 | 0.59 |

Source: Research data