THE EFFECT OF MANAGEMENT STRATEGIES BY NATIONAL TRANSPORT AND SAFETY AUTHORITY ON OPERATIONS OF BODA BODA IN NAIROBI, KENYA

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DECLARATION

This research project is my original work and has not been presented for award of any degree in any other University.

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This research project has been submitted with my approval as university supervisor.

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DEDICATION

This research project is dedicated to my beloved wife Nancy Mwendelani, my daughter Neema Moraa and my Mother Lucia Moraa for their love, support and all the encouragement during the entire process. May God bless you.

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ABBREVIATIONS AND ACRONYMS

GoK	:	Government of Kenya
ICT	:	Information and Communication Technology
KNBS	:	Kenya National Bureau of Statistics
КРН	:	Kilometers per Hour
МоТ	:	Ministry of Transport
NTSA	:	National Transport Safety Authority
RBT	:	Resource Based Theory
RBV	:	Resource-Based View
SACCOs	:	Savings and Credit Co-operatives Societies
SMEs	:	Small and Medium Enterprises
UK	:	United Kingdom
WHO	:	World Health Organization

ABSTRACT

The transport industry especially motorcycle has been realizing a high growth rate in developing countries like Kenya and is popularly referred to as BodaBoda. In spite of various strategic approaches, infrastructural decisions, transportation mode mix and vehicle and fuel technology being modified at the international level to cut greenhouse gas emissions, they have trickle – down effect on how transport problems will be managed in developing countries in the future. Therefore, the main aim of this research was to investigate the effect of management strategies of NTSA on operations of BodaBoda in Nairobi. The study was anchored on three theories namely modern management theory, resource based theory and Mckinsey 7-S framework. The study relied on descriptive research design with population of interest consisting of BodaBoda operators within Nairobi City County. Primary data was collected by use of survey questionnaire from a sample size 100 respondents. Quantitative techniques were adopted in data analysis. The results show that NTSA management strategies are statistically significant relationship towards BodaBoda operations in Nairobi City County. Therefore, the more the NTSA management strategies are adopted the higher chances of improving the BodaBoda operations. The study concluded that the business environment from which BodaBoda riders operates was stable with presence of NTSA management strategies. It was recommended that NTSA should initiate an intensive training which should be a mandatory to all the BodaBoda operators in order to impart knowledge on safety training as well as technical skills required for to operate motor cycle business. Furthermore, the government should establish or facilitate formation of SACCOs for all the BodaBoda riders in Kenya.

CHAPTER ONE INTRODUCTION

1.1 Background

Transport is critical for economic development. In the urban setting, the quality of transport infrastructure and public service transport influence the location of firms and individuals (Lubisak, 2013). Recently, there has been increase of motorcycles in the developing economies. Most Asian nations have adopted motorcycles and three-wheeled locomotives as their basic means of transport in urban roads. The use of motorcycles as taxis in China originated towards the end of 1980s and the beginning of 1990s. This type of taxis is present in all cities of China including Shanghai, Guangzhou and Beijing. They are basically famous due to their low price levels as compared to the rest (Pucher*et. al.*, 2007). Studies in Africa have shown that the use of motorcycles for commercial transport has rapidly expanded over recent years in Lagos, Douala and Kampala (Kumar, 2011). In Africa motorcycles in Nigeria, are popularly *okada* and in Kenya and Uganda they are known as BodaBoda mainly used as another means of transport and are the most common way to get around (Gbadamosi, 2002; West, 2011).

This study is anchored on the modern management theory which argues that there is no one best way of doing things. Modern management theory looks at an organization through the open-system view where the organization is treated as an open system that interacts with the environment continually in order to flourish. A significant association exists between an organization's structure and implementation of strategies (Pearce & Robinson, 2005). According to the Resource-Based View (RBV) theory organizations can perform better than their competitors when they have enough resources and the ability which cannot be done by others. This theory explains the dependence of the organization to the environment for the resources required in strategy implementation (Penrose, 1959).

Most of Kenya's population neither has access to personal vehicles nor any form of motorized transport. BodaBoda offer good value for money and therefore there is potential for development of their conditions (Mbugua, 2011). Compared with other automobiles, and bicycles, motorcycles offer their users, great flexibility enabling them to maneuver around quite fast. Their efficient acceleration and braking system generally gives their operators the confidence to move both at moderate and higher speeds. They tend to move at an average speed of 10 Kilometers per hour faster than autos using the same roadway or streets (Haider & Badami, 2007). Latest statistics is that out of 1,176 accidents for 2017 the month of May alone BodaBoda has contributed 205 which is very high number (NTSA, May 2017). This study focuses on investigating the management strategies.

This study is informed by the fact that transportation planning faces a number of problems which compromises the effectiveness in transport system and the significant increase in the hurdles of creation of smooth transportation systems in future. BodaBoda operations in Nairobi, Kenya have been one of the major contributors to employment amongst the youth yet they have also been the largest contributor to road injuries and accidents since inception. According to the Economic Survey (2013), motorcycle sales in 2012 were at 93,970 units which made up 54% of all registered vehicles and in 2011 140,215 made up 68% of the registered vehicles (KNBS, 2013). WHO (2011)noted that fatalities from motorcycle accidents in 2010 stood at 215 while KNBS (2013) report fatalities stood at 430 indicating a 50% fatality increase per year. If the factors remain constant a projection of mere 5 years will mean a 250% increase in motorcycle fatalities unless intervention is made.

In addition, the rising number of BodaBoda transport services, has increased congestion, and petroleum consumption thereby increasing environmental pollution. Despite extensive spending by the government on transportation and related systems of infrastructure, these problems tend to worsen and this is an indicator that these problems require an investigation on how they are strategically managed. There is a gap in the literature on strategies for BodaBoda transport services in Nairobi, Kenya.

1.1.1 Management Strategies

Strategy is derived from a wealth of experience, observations and knowledge. According to Johnson Scholes and Whittington (2005), strategy is direction adopted by firms in the long run so as to attain competitive advantage in changing business environment through use of core competencies and resources to fulfill the expectations of the stakeholders. The actions of management strategy are future oriented in the sense that it seeks to establish the association between the industry and the environment, that is, ways in which it adjusts to the changing environment thus it stipulates guiding principles used by industry actors in decision making (Porter, 2008).

Any organization adopts a strategic approach that suits it most. All choices are perceived to be correct, though the chosen strategic philosophy determines the destiny of an organization (Hall, 2005). According to Porter (2008), it is evident that majority of firms do not meet the continuously changing long term market needs and the expectations of their customers. When strategy is being implemented, monitoring and controlling its success and effectiveness should be emphasized (David, 2002). Management strategies can be a catalyst for improvement of the societal welfare through conducive economic, social and political conditions. Both qualitative and quantitative improvements in human capital such as income and capital and physical

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utilities such as transport and communication infrastructure are the expected outcomes.

1.1.2 Firm Performance

Rickard and Kono (2013) argued that performance of an organization can be described based on three specific elements of firm's outcome: shareholder return, return on assets as well as financial performance. The success of a firm, conditions and compliance are measures through which performance can be established. In transport, ratio indicators such as vehicle kilometers per active vehicle, revenue vehicle hours per dollar operating cost and passengers per revenue vehicle hour are the most used ratio indicators of performance.

What makes transportation services different from the manufacturing sector services is that its services cannot be stored, thus the final product such as passengerkilometer, greatly varies from the intermediate output such as kilometers covered in a transportation system (Karlaftis, 2004). Thus the most suitable measurement of performance for a transport organization needs to consider the network structure of concurrent service production and consumption and interactions within that specific structure.

1.1.3 BodaBoda Operations

BodaBoda transport is a motor cycle and bicycle passenger and small good carrier. It operates where more advanced transport services are physically impossible or uneconomical. They are available both in rural and urban areas and provide primarily feeder services to towns and major routes (Howe & Davies, 2002). BodaBoda operations are mostly drawn from those with little education backgrounds with most of them depending entirely on them for their livelihoods. The livelihood of others is supported through provision of repair and maintenance services to enable them meet their needs. Although BodaBoda business started off generally as small scale business it has grown exponentially in the Market.

According to Mutiso and Behrens (2012) BodaBoda transport services in Kenya originated in Uganda where they emerged in the 1960s in the Kenya-Uganda border. BodaBoda is a term that was corrupted from an English term 'border to border'. BodaBodas basically provide taxi services to their customers though they are can also offer transport services. This service was originally provided on a man's bicycle fitted with a rear carrier behind. Mutiso and Behrens (2012) argue that over the past two decades, BodaBoda operations have increased at a faster rate compared to other conventional means of transport in Nairobi, Kenya. This is because of their maneuverability, reliability and always ready on demand. Many view it as a means of providing an identifiable way of income enhancement through extension of the range and intensity of activities which generate income. It acts as a source of employment to the poor.

Aduwo (2000) explained that BodaBoda operators presently have realized the importance of differentiating their services to gain competitive advantage through customer service, customized seats with extra cushioning for comfort and flexibility in times of operation. Perco (2008) observed that BodaBoda operators are faced with unique challenges in third world countries which are not experienced by developed nations. Motorcycles have a poor road safety record as compared to other categories of road users. Their rate of injuries and death in the UK, per million vehicle kilometers, is approximated to be twice that of cyclists' who pedal and 16 times above that of passengers and car drivers. Motorcyclists contribute to less than 10% of vehicles traffic but 14% of serious injuries and deaths affect their riders on Britain's

roads (DETR, 2010). In the year 1999 a motorcyclist was seriously injured or killed for every 665,894 kilometres ridden. An average of 18,661,626 kilometres was however covered by car drivers before death or an injury was encountered. These numbers indicate that in 1999, motorcycles were 28 times more prone to result to death or injury as compared to car drivers. Chesham *et. al.* (1993) did a comparison between the distance covered with sustained injuries and established that motorcyclists were 35 times prone to die as a result of an accident or sustain serious injuries as compared to car drivers in 1990.

In Kenya, there has been a rising concern over the increasing number of BodaBoda accidents. NTSA records indicate that at least 291 BodaBoda riders had succumbed to road accidents in Kenya by September 2014, according to NTSA, 2015 this indicated a rise in the number of deaths as compared to 234 deaths recorded during the same period in 2013. It is also observed that out of the 3,000 Kenyans who die every year in road carnages, BodaBodas contribute to the largest number of those affected (Daily monitor, July 3 2015). Latest statistics is that out of 1,176 accidents for 2017 the month of May alone BodaBoda has contributed 205 which is very high number (NTSA, May 2017). Cognizant of these fatalities, National Transport and Safety Authority has formulated several measures; these include restriction of BodaBoda operations to counties and making it a requirement for passengers to adhere to traffic regulations and always ensure their safety.

The NTSA Act 2015 clearly stipulates guidelines governing motorcycle operation in Kenya. Under this act, all the motorcycles sold or transferred to other persons must have two reflector jackets and helmets. It is also mandatory that the riders have third party insurance, driving license and provide passengers with protective gear. The riders should "ensure that passengers and loads are not carried at the same time" and not "carry more than one person at a time" (NTSA, 2015).However, even with these regulations in place, the country continues to face several challenges in managing BodaBoda operations.

1.2 Research Problem

Many countries face challenges in management of transport services. The transport industry especially motorcycle has been realizing a high growth in developing countries like Kenya (KNBS, 2013). The popularity of BodaBoda has been growing and has been found to pose safety challenges to a growing population of passengers while creating conflict with other vehicles (MoT, 2010). If improvement in flexibility is attained basically through depending more on established private vehicles, its implication will be suffering traffic congestion and air pollution and diversion of financial resources to roads.

In spite of the differences in strategic approaches, infrastructural decisions, transportation mode mix and vehicle and fuel technology are being modified at the international level to cut greenhouse gas emissions and this will have a trickle – down effect on how transport problems will be managed in developing countries in the future. The lack of adequate strategies for effective coordination and monitoring of BodaBoda transport operators, in Nairobi, Kenya has resulted in significant challenges. The challenge has been the increasing number of BodaBoda accidents (NTSA, 2015). It is estimated that out of 3,000 Kenyans who die annually due to road accidents, BodaBodas victims are the highest, (Daily monitor July 3, 2015). Nairobi County is also experiencing serious congestion, high petroleum dependence, air pollution and these have a direct hindrance to trade and economic development. Recently, NTSA released reports that 1,176 accidents for the Month of May year 2017 where BodaBodas alone contributed 205 (NTSA, May, 2017).

Watson, Wilks and Zador (2006) tested the impact of revoking helmet laws use on motorcyclist's mortality rate in the US between 1975 and 1978. Their findings indicated that motorcyclist fatality rate was reduced by helmets from 24% to 50%. A study done by Muogbo (2013) in Nigeria on the impact of strategic management on organizational growth and development, discovered that strategic management was viewed as the most suitable tool for performance improvement, structural development and competitiveness of manufacturing firms. Another study by Nyamasege (2012) was on the firm's benefits that accrue to dominance of competitors. It was discovered that firms perform differently despite the common operating environment due to the various stages of strategic development process.

In local context, Okeyo (2016) research was on the effects of integrated national transport policy on transport service delivery in Nairobi City County, Kenya. This study discovered that policy implementation led to improvement in service delivery. Maina (2011) realized that stakeholders' involvement in strategy implementation enhances an integrative point of view. Gichunge (2006) conducted a study titled the influence of formal strategic management on the performance of an organization and concluded that formal strategic management has been adopted by most enterprises.

Despite the alarming fatalities resulting from BodaBoda operations, there has been little research focusing on the management strategies. Against this background, this research seeks to establish the effects of management strategies adopted by NTSA and its impact to BodaBoda operations in Nairobi, Kenya. The research sought to respond to the following research question: what are the effects of management strategies of NTSA and how does this affect BodaBoda operations within Nairobi?

1.3 Research Objectives

The main aim of the research was to investigate the effect of management strategies of NTSA on operations of BodaBoda in Nairobi.

The specific objectives of the study were:

- i. To identify the management strategies of NTSA in Nairobi, Kenya.
- ii. To establish the effects of the management strategies on BodaBoda operations within Nairobi.

1.4 Value of the Study

This survey is of value to BodaBoda operators and National Transport Safety Authority as well as other stakeholders in Kenya. This study provided a deeper understanding of Kenya's transport system thus enabling optimal adaptation and also enabling it to constructively engage in various management strategies and the influence of the performance of BodaBodas in Kenya. This study is also important to all those stakeholders that would like to understand and venture into motorcycle or public transport as they would be equipped with the necessary knowledge for the operations.

The research gave valuable information to decision makers on the need for an enabling business environment for attracting and retaining effective road transport thus allowing Kenya to reap the full benefits that this form of transport brings with it. Furthermore, the findings provided guidelines to other developing countries in developing friendly management strategies and policies for motorcycle mode of transport. The research therefore contributed to literature in existence on the topic under review. The findings of this research are crucial in building up on the existing theoretical frameworks and empirical studies. Therefore, this information can be used as a reference for further investigations on the related studies. The research also pointed out crucial recommendation and areas in the study that require further research.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literature related to strategy management in the transport and theories used. It particularly focuses on theoretical foundation for the study, empirical literature review, conceptual framework and their effects. It ends with summarization of review of literature.

2.2 Theoretical Review

Three theories are used as the base of this study to explain the institutionalization of the strategy. The Modern Management Theory, resource based theory by Penrose (1959), and Mckinsey 7-S framework by Peters and Waterman (1982). The theories are discussed below.

2.2.1 Open Systems Theory

This theory was founded by a biologist by the name Ludwig von Bertanlanffy in the year 1956 and it can be applied across all disciplines. The theory came into existence after World War II citing the criticism of the earlier organizations' theories like that of Elton Mayo (human relations perspective) and that of Henri Fayol (administrative theories) since they viewed firms as a self-contained entity (Pfeffer & Salancik, 2003). The perspective of open systems is applicable to almost all modern organization theories such as contingency theory, institutional theory, and resource dependency theory.

Principally, the theory states that firms or individuals or business are normally affected by environment in which they are located or operate from (McLaughlin & Talbert, 2001). Some of the factors that form business environments can be social

forces, political forces, as well as economic forces. This environment can as well provide major resources leading to business sustainability, growth as well as survival. This theory advocates for individuals to collaborate or work jointly with others since when many heads are put together the information is passed easily, decisions are easily made and actions are taken fast (Scott, 2002). Therefore, the applicability of this theory to BodaBoda is that they tend to do their operations in groups and that the information on the policies and guidelines are easily followed. Thus, forming systems which tend to exchange resources within their environment of operations and help in ensuring survival.

2.2.2 Resource Based View

The resource based view was established by Penrose (1959) though it is more attributed to Barney (2001). According to this theory, competitive advantage is attained by an organization when it implements a strategy which contributes to value addition and is not being implemented by both current and potential competitors. The firm resources that are used in the implementation of value creating strategies are divided into three types of assets namely human capital, organizational capital and physical capital. These assets become the strategic assets of an organization when they rare inimitable, non- substitutable and valuable thus enabling the firm to achieve sustainable competitive advantage.

Habbershon and Williams (1999) noted that taxi business has a description of being dynamic, complex and also full of resources that are intangible. RBV avails scholars in strategic management field with better analysis method. BodaBoda business presents a number of capabilities as well as strategic resources that lead to better competitive edge. The unique assets of this kind of business help them in developing, choosing, and implementing of business strategies. Teece et al. (1997) argued that RBV argues that a given business has the ability of outperforming the rest because of its capability of developing resources and capabilities that are valuable and unique to the rivals. The main considerations which should be given to research in the field of BodaBoda business, is that issue of use of NTSA management strategies in influencing its performance.

RBV has been faced by some criticism that it has some shortfalls. It has been argued that recourse-based view does not have implications on management, involves unlimited retreats and cannot achieve competitive advantage that is sustainable (Kraaijenbrink *et. al.*, 2010). RBV describes management development and obtaining of its management resources. Nevertheless, RBV does not give proper explanation on how this can be done by managers. Currently, businesses environment is ever changing and the idea of coming up of more innovative is mandatory. RBV helps in sustaining the competitive edge of a given business, but only if there is proper utilization of resources.

2.2.3 McKinsey 7-S Framework

The Mackinsey 7-S framework is a quantitative framework which was developed at the Mckinsey consulting company by Waterman and Peterson to aid the analysis of the seven different components of an organization to determine its functioning effectiveness. Peters and Waterman (1982) specify that this model leans on the fact that an organization should not only be viewed as a structure but a system which is composed of seven vital aspects which include Structure, Strategy, Systems, skills, Staff, (people), shared values (Culture), (the 7s) and Style (Leadership). Ideally, Strategy basically describes how the objectives of a firm can be attained. The main function of strategy is to select the major business activities to indulge in so as to improve customer services and perform those in the most economical way so as to gain efficiency. The term strategy is further described by authors as the course of action or plan in resource allocation to attain specified goals over a given period. The skills variable refers to staff capabilities within the entire organization. Systems are the procedures and processes followed when carrying out daily organizational duties whereas staff is defined according to categories of personnel in the organization (for example, doctors). The behavior of key managers in the achievement of organizational goals is perceived as the style variable. This variable is perceived to consist of the organization's cultural style.

The variable of shared values, originally referred to as ordinate goals, refers to the guiding concepts or significant meanings shared by organizational members (Waterman& Peters, 1982).It can also be concluded that the softer components of the model cannot be easily changed thus can be termed as the most difficult features of change-management plan. Cultural change and overcoming of staff resistance to change especially those which affect the power structure within the organization and the inherent organization's value are hard to manage. These factors however greatly affect the organization's structure, systems and strategies when altered with.

2.3 Empirical Evidence

The studies of management strategies have been emphasized both locally and internationally. According to Peltzman (2005), early studies begun in 1966 in United States and indicated that motorcyclist fatality rate was reduced by helmets by 24% to 50% (Leigh & Sass, 2001). Watson, Wilks and Zador (2006) tested the impact of revoking helmet laws use on motorcyclist's mortality rate in the US between 1975-1978. Their research did not apply statistical methods to match the states that made

weak their helmet laws with other states from the same area that changed such existing laws nor had helmet laws before.

Nyamasege (2012) holds that the main aim of any strategic research is find out the benefits that accrue to a dominant which it may use against its competitors over that specified period. Firms however perform differently despite the common operating environment due to the various stages of strategic development process. Maina (2011) asserts that, stakeholders' involvement in strategy implementation enhances an integrative point of view, that is, the process is only limited to organizational structure, but also to human resources and cultural aspects perspective as well as human resource perspective. This is of great importance since teamwork plays an important role within the process of strategy implementation.

A study done by Muogbo (2013) in Nigeria on the impact of strategic management on organizational growth and development (a case study of chosen manufacturing firms in Anambra). This study's main objective was to investigate the impact of strategic management on the growth and development of selected manufacturing firms in Anambra State. The research methodology adopted in this study was Survey. A sample of 63 respondents was chosen from 21 manufacturing firms across three senatorial zones of Anambra and three respondents sampled from each firm. From the study, it was concluded that despite the fact that strategic management is not a well established business practice among most manufacturing firms in Anambra State, it is viewed as the most suitable tool for performance improvement, structural development and competitiveness of manufacturing firms in Anambra State in Nigeria

Gichunge (2006) conducted a study with the title the influence of formal strategic management on the performance of an organization: The study was conducted on the

selected MEs in Nairobi, Kenya. This study's main objective was to investigate the effect of formal strategic management on the performance of medium sized manufacturing enterprises in Nairobi, Kenya. Survey was the research design adopted for this study. Simple random sampling was used to select Eighty MEs to be used in the study and the questionnaire was administered for data collection. From the study, it can be concluded that formal strategic management has been adopted by most enterprises. This varies from the existing empirical studies which state that formal forms of strategic management have not been adopted by enterprises. It is however consistent with previous studies which are legal /administrative factors affecting both organizational performance and adoption of formal strategic management.

CHAPTER THREE RESEARCH METHODOLOGY

3.1 Introduction

The methods of research applied in the study are outlined in this section. It also covers the design of research, target population, sample and sampling technique, methods of data collection and analysis to be employed in meeting the research objectives.

3.2 Research Design

Research design is the criterion of collecting, measuring and analyzing data in order to obtain objectives of a particular research (Cooper & Schindler, 2006). Chandra (2004) stipulates that the research design enables the accomplishment of research objectives through empirically obtained research evidence. The factors which determine the research design to be adopted include: The purpose of the research, data sources, cost implications and the categories of data required. This study employed the descriptive research design. Descriptive research describes the current state of the concept to describe the available in relation to conditions or variables in a situation. Mugenda and Mugenda (2010) describe descriptive research as the data collection process so as to respond to questions of the subject under study.

The core use of descriptive statistics is description of data or information by use of numbers. The attributes the elements or groups representing the data or information are referred to as descriptive statistics (Kay, 2004). Mugenda and Mugenda (2010) further described this type of research as an attempt to describe factors such as attitudes, possible behavior, characteristics and values. The description of this research design matched with the objective of this study as the study sought to investigate the strategies used in the transport sector and their effect on BodaBoda operations.

3.3 Target Population

The research was a descriptive survey with population of interest consisting of BodaBoda operators within Nairobi City County. The BodaBoda operators were mainly from the four main sides of Nairobi County which were divided into; West of Nairobi (The Westland area), East of Nairobi (The Eastland area), South of Nairobi and North of Nairobi.

These areas covered the four main routes which are the main entry into the Central Business district. The four main routes were further classified into main stages where the BodaBodas operate from and they included; Donholm stage which represented the Eastland area and Jogoo road, Langata which represented the Southland area, Uthiru which covered Westland section and Waiyaki Way and Dagoretti Corner which represented North of Nairobi, Ngong road and Kawangware.

3.4 Sample Size and Sampling

Since the total target population in the study area is unknown, the following formula was used as suggested by Webster (1995) to estimate the sample size of this kind of population.

$$n = \frac{2\pi(1-\pi)}{(err\beta)}$$

Where π is taken to be 50% of respondents in study area. At the 95% desired level of confidence and margin error of 0.1 the sample size (n) is calculated as:

$$n = \frac{(1.96)^2 (0.5)^2}{(0.1)^2}$$

$$n = \frac{(3.8416)(0.25)}{(0.01)} \approx 96$$

Therefore, the total sample size was 96 which and this was rounded off to 100 respondents. Systematic random sampling technique was used to pick the respondents from the designated areas. This enabled the participants to have an equal chance of being picked as respondents.

3.5 Data Collection

Primary data was collected by use of survey questionnaire which was administered to all the selected respondents for the study to enable gathering of information concerning various aspects of BodaBoda operations. Relevant structured and unstructured questions were applied to enable gathering of the appropriate data. Some questions were open-ended while others were closed ended. The questionnaire as a tool used in collection of data comprised of several parts. Part one contained the general information, part two dealt with aspects of management strategies and part three entailed the features of business performance. The research assistants were used in dissemination of the questionnaires directly to BodaBoda operators.

3.6 Data Analysis

The answered questionnaires were checked to confirm if they were complete and consistent before the data analysis process begun. Quantitative techniques were adopted in data analysis. Data analysis was performed with the help of Statistical Package for Social Sciences (SPSS) version 22. Descriptive statistics was used to analyze data which was done inform of means, percentages and frequencies. This data was then interpreted in relation to the objectives of this study. The presentation of

data was done by use of tables, graphs and pie charts so as to enhance interpretation and understanding.

However, in establishment of the effects of the management strategies on performance of BodaBoda transport within Nairobi, the study used recommendable tests that helped in achievement of the same. This was done by use of inferential analysis whichwas guided by the following regression analysis equation:

 $Y = \alpha + \beta_1 M S_1 + \epsilon$

Where:

 α = Constant

- X_1 = Management strategies
- β_1 is regression coefficients of the independent variable.

$$\varepsilon$$
 = Error term.

CHAPTER FOUR DATA ANALYSIS RESULTS AND DISCUSSION

4.1 Introduction

The goal of this research was to look into the effect of management strategies by National Transport and Safety Authority on BodaBoda operations within Nairobi, Kenya. The chapter presents the Primary Data based on the methodology stated in chapter three. It is comprised of the following sub-sections: response rate, background information, management strategies, BodaBoda operations as well as inferential analysis.

4.2. Response Rate

The findings on the response rate are as indicated in Table 4.1. There was a target of 100 respondents anticipated by the study to respond to survey questionnaire. However, out of the estimate figure, 88 responded by filling in and returning the questionnaires. Thus, the projected response rate was 88 percent

Table 4.1: Distribution of Response Rate

Frequency (n)	Percentage (%)
88	88
12	12
100	100
	Frequency (n) 88 12 100

Source: Author (2017)

Hence, the rate of response recorded by the study was found to be fit for analysis since Mugenda & Mugenda (2010) advocate that any response rate ranging from 70% and above should be considered as excellent for analysis and making conclusions.

4.3 Respondents Demographic Profile

The sub-section of background information entails findings on gender of respondents, their respective age brackets, education level, outcomes on possession of a driving license as well as length of time of which BodaBoda riders have been in operation.

4.3.1 Gender of Respondents

The research sought to establish the gender of the BodaBoda operators who participated in this research. As shown in Table 4.2, majority (97.7%) of them were found to be male while 2.3% were female. These findings show that the gender distribution is more inclined to one gender and therefore is a sign of imbalance lack of gender diversity among the BodaBoda operators in Nairobi City County.

Gender	Frequency (n)	Percentage (%)
Male	86	97.7
Female	2	2.3
Total	88	100

Table 4.2:	Respondents'	Gender
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Source: Primary Data

4.3.2 Age of Respondents

The researcher made the decision to divide respondents' age into different reasonable groups ranging from 20 to over 50 years as illustrated in Table 4.3.

Duration	Frequency	Percent	
20 - 29 Years	39	44.3	
30 - 39 Years	38	43.2	
40 - 49 Years	10	11.4	
50 Years and above	1	1.1	
Total	88	100	

Table 4.3: Percentage Distribution of Respondents' Age

Source: Primary Data

From the responses received, majority of the respondents felt in age bracket of 20 - 29 and 30 - 39 with 44.3% and 43.2% respectively, 40 - 49 had 11.4%, while range of years of 50 and above represented 1.1% as illustrated in Table 4.3. Therefore, representation indicates that the people who participated in the study were mature and that the BodaBoda operators in Nairobi City County are comprised of mixed age groups, majority of them being youth.

4.3.3 Respondents' Highest Education Level

The study required the respondents to indicate their level of education and the results are as shown in Table 4.4.

Table 4.4: Education Level of Respondents

Level of Education	Frequency	Percent
Primary	7	8.0
Secondary	38	43.2
Post Secondary	43	48.8
Total	88	100

Source: Primary Data

The findings reveal that majority of the respondents (48.8%) fell under the category of post secondary, while 43.2% of the respondents had achieved secondary school certificate while a few 8% of the respondents had achieved Kenya certificate of primary of education. This could mean that the respondents who participated in this research were well informed on the topic under investigation and therefore, gave relevant data for this study.

4.3.4 Possession of Driving/Riders License Class G

The study required the respondents to indicate if they possessed a driving or riders license class G and the results are as shown in Table 4.5.

Responses	Frequency	Percent
Yes	62	70.5
No	26	29.5
Total	88	100

Table 4.5: Possession of Driving/Riders License Class G

Source: Primary Data

An overwhelming majority of the respondents (70.5%) indicated to have possessed the license required for BodaBoda operation. On contrary, about 29.5% of the respondents did not have this crucial document necessary for their daily operations. This revelation could indicate that there are some BodaBoda riders who are not fully trained to operate motorcycle which is currently the main tool of operation and therefore, risk to cause accident or being arrested by the authorities in charge.

4.3.5 Experience as BodaBoda Operator

The study sought to determine the length of time that the respondents have worked as BodaBoda operators and the results are as shown in Table 4.6.

Duration	Frequency	Percent
Up to one year	5	5.7
Two – Three years	30	34.1
Four – Five years	28	31.8
More than five years	25	28.4
Total	88	100

Table 4.6: Years of Operation

Source: Primary Data

indicate that most of the respondents (34%) had been in operation for a time period of between 2 and 3 years, 31.8% were found to have operated for 4-5 years, 28.4% for more than 5 years while 5.7% for up to one year. This result indicates that most of the respondents had been in operation long enough to understand the entire operation process and regulations to be followed. Thus, an indication that the respondents had adequate working experience in their respective line of business and therefore, possess the necessary knowledge and information which was considered valuable for this study.

4.4 NTSA Management Strategies

4.4.1 Familiarization with National Transport and Safety Authority

The research sought to determine if the BodaBoda operators had knowledge and whether they were familiar with the National Transport and Safety Authority laws and management strategies, where the outputs are as given in Table 4.7.

Responses	Frequency	Percent
Yes	74	84.1
No	14	15.9
Total	88	100

Table 4.7: Familiarization	with National	Transport and	Safety Author	ity
		1	•	•

Source: Primary Data

The findings indicate that overwhelming majority (84.1%) of those who participated in this research were familiar with the NTSA as a regulatory body, while 15.9% were not aware of the existence of such body. This is an indication that some of the BodaBoda riders were not familiar with the authority that regulates their business operations.

4.4.2 Awareness of Rules and Regulations Governing Transport Sector

The study required the respondents to indicate if they are aware of rules and regulations governing the transport sector and the findings as provided in Table 4.8.

Responses	Frequency	Percent
Yes	71	80.7
No	17	19.3
Total	88	100

 Table 4.8: Awareness of Rules and Regulations Governing Transport Sector

Source: Primary Data

The findings indicate that a high number of respondents (80.7%) responded yes to being aware of the rules and regulations, while 19.3% were not aware of the rules. This can lead to an implication that there are still some BodaBoda writers who do not observe rules and regulations. This could be due to lack of training or awareness among the BodaBoda riders in operating in Nairobi City County.

4.4.3 Involvement in Accident

The findings given in Table 4.9 are for the question which study sought to find out whether the BodaBoda operators had been involved in any accident during their time of operations.

Table 4.9: Involvement in Accident

Responses	Frequency	Percent
Yes	32	36.4
No	56	63.6
Total	88	100

Source: Primary Data

It was revealed that majority (63.6%) of the BodaBoda riders were not involved in any accident, while 36.4% had been involved in a road accident. Thus, indicating that the level of accident by BodaBoda operators is quiet high and alarming. This could be due to the previous findings which indicated that some BodaBoda riders were not aware of the rule and regulations governing their operations. Other reasons could be lack of training, poor infrastructure, poor maintenance of their motorcycles or even negligence.

4.4.4 Frequency of Involvement in Accidents

Those who were involved in accident were required to indicate the number of times of which they have been involved in accidents and the findings are as shown in Table 4.10.

Frequency	Frequency	Percent
Once	13	40.6
Two - Three times	9	28.1
Four - Five times	10	31.3
More than five times	0	0.0
Total	32	100

Table 4.10: Frequency of Involvement in Accident

Source: Primary Data

It can be pointed out that majority (40.6%) of them had been involved in accident once, 31.3% were found to have been involved in accident 4-5 times, and 28.1% had been involved in accident 2-3 times. These results are an indication that quite a good number of BodaBoda operators together with their clients are at risk of body injury or lose of life due to road accidents.

4.4.5 Wearing of Protective Gear

On the question of whether the BodaBoda operators wear protective gears during their operational hours, the findings are provided in Table 4.11.

Table 4.11:	Wearing	of Protective (Gear
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Responses	Frequency	Percent
Never	1	1.1
Sometimes	47	53.4
Always	40	45.5
Total	88	100

Source: Primary Data

It can be deduced that majority (53.4%) of the respondents indicated that they sometimes wear the protective gears, an estimate of 45.5% of those who were interviewed affirmed that they always wear their protective gears while on the road. However, only 1.1% of the respondents were discovered not to have worn the protective gears in their entire time of operations.

4.4.6 Road Safety Training

On whether the BodaBoda operators had received training on road safety, the results are as shown in Table 4.12.

Responses	Frequency	Percent
Yes	67	76.1
No	21	23.9
Total	88	100

Table 4.12: Responses on Road Safety Training

Source: Primary Data

An estimate of 76.1% acknowledged that they had received the road safety training while 23.9% of the respondent said they had not received any training. These results are positive as they are indication that, quiet a big percentage of BodaBoda operators have been trained on road safety.

4.4.7 Rating the Management Strategies of NTSA

The study sought to determine the respondent's level of agreement with various statements on the management strategies of NTSA as indicated in Table 4.13. This was done based on a various scores which included VI representing very important,

MI which stands for moderately important, IND was for indifferent, MIR represented moderately irrelevant, VIR was a representation of very irrelevant while N/A signified not applicable.

Management			Pe	rcentag	ge Rati	ngs		
Strategies	VI	MI	IND	MIR	VIR	N/A	Total	Mean
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Scores
Road safety education	69.3	22.7	0.0	1.2	0.0	6.8	100	1.19318
Registration of								
vehicles and	58.0	38.6	2.3	0.0	0.0	1.1	100	1.48864
motorcycles								
Awareness creation on	59.0	27 5	2.2	1 1	1 1	0.0	100	1 50000
drivers/riders	38.0	57.5	2.5	1.1	1.1	0.0	100	1.30000
Licensing of vehicles	-					0.0	4.0.0	1 50050
and motorcycles	58.0	36.3	3.4	0.0	2.3	0.0	100	1.52273
Vehicle certification	52.3	38.6	5.7	2.3	0.0	1.1	100	1.62500
Vehicle inspection	52.3	31.8	11.3	2.3	2.3	0.0	100	1.70455

 Table 4.13: Responses on Road Safety Training

Key: VI = Very Important, MI = Moderately Important, IND = Indifferent, MIR = Moderately Irrelevant, VIR = Very Irrelevant, N/A = Not Applicable

Source: Primary Data

The findings on road safety education give a revelation that approximately 69.3% respondents rated this strategy as very important, 22.7% moderately important, 6.8% not applicable and 1.2% moderately irrelevant. On the aspect of awareness creation on drivers or riders majority at 58% rated it as very important, 37.5% of the respondents rated it as moderately important, 2.3% were indifferent, while those rated it as

moderately irrelevant and very irrelevant each had 1.1% respectively. On another NTSA strategy that deals with registration of vehicle and motorcycles about 58% of those who were interviewed rated it as very important, about 38.6% of them rated it as moderately important, 2.3% were found to be indifferent and 1.1% did not see it to be applicable.

The respondents further rated the strategy of licensing of vehicles and motorcycles and the outcomes are as follow: about 58% of the respondents agreed that this strategy was very important, 36.3% found it moderately important, 3.4% seemed to be indifferent while 2.3% of them felt it was very irrelevant. The other strategy was on vehicle inspection where 52.3% of the respondents rated it as very important, 31.8% rated this strategy as moderately important, 11.1% were indifferent, while those rated it as moderately irrelevant and very irrelevant each had a representation of 2.3%. Consequently, the research sought the respondents' opinion on the NTSA strategy that involves vehicle certification. The outcomes indicate that 52.3% of the interviewees rated it as very important, 38.6% rated it as moderately important, 5.7% were indifferent, 2.3% felt it was moderately irrelevant and 1.1% found it not applicable.

The results on the mean scores reveal that the respondents rated the NTSA strategies/practices in the following order from most important to most irrelevant. Road safety education, registration of vehicles and motorcycles, awareness creation on drivers/riders, licensing of vehicles and motorcycles, vehicle certification and vehicle inspection.

4.5 BodaBoda Operations

4.5.1 BodaBoda Business Meeting Living Standards

The study made an inquiry on whether the BodaBoda operations were able to meet their living standards and the results are shown in Table 4.14.

Responses	Frequency	Percent
Yes	62	70.5
No	26	29.5
Total	88	100

 Table 4.14: Whether BodaBoda Operations Meet Living Standards

Source: Primary Data

About three quarters (70.5%) of the respondents acknowledged that their businesses enabled them to meet their living standards. Approximately, 29.5% of them felt that BodaBoda business was not able to meet their living standards. This shows that the business of BodaBoda operations when managed well can sustain the owners' living standards.

4.5.2 Daily Earnings

The study sought to ascertain the average daily earnings of the BodaBoda operators and the outcomes are as presented in Table 4.15.

Table 4.15: Average Daily Earnings

Daily Earnings in Ksh.	Frequency	Percent
Less than Ksh. 1000	19	21.6
Ksh. 1000 - 1500	43	48.9
Ksh. 1501 - 2000	17	19.3
Ksh. 2001 - 2500	4	4.5
Ksh. 2501 - 3000	5	5.7
Total	88	100

Source: Primary Data

On average, majority (48.9%) of the BodaBoda operators who were interviewed revealed that they were earning between Ksh. 1,000.00 and 1,500.00 daily. About 21.6% of the respondents were found to earn less than Ksh. 1,000.00 per day. On daily basis, 19.3% of the BodaBoda operators under investigation disclosed that they were earning between Ksh. 1,501.00 and 2,000.00. Likewise, the daily income of about 5.7% of the respondents ranged from Ksh. 2,501.00 – 3,000.00 while those who earned a daily income of between Ksh. 2,001.00 and 2,500.00 had a representation of 4.5%

4.5.3 Record Keeping

On different note, the study resolved to know whether BodaBoda operators kept records, the results are given in Table 4.16.

Table 4.16: Whether BodaBoda Operators Keep Records

Responses	Frequency	Percent
Yes	54	61.4
No	34	38.6
Total	88	100

Source: Primary Data

It can be construed that 61.4% of the respondents kept records for their respective businesses. On other hand, 38.6% were found not to have kept records for their daily operations.

4.5.4 Asset Acquisition from BodaBoda Operations

Accordingly, the research sought the riders' opinion on the aspect of asset acquisition, as displayed in Table 4.17.

Asset	Yes (%)	No (%)	Total (%)
Land	20.5	79.5	100.00
Permanent house	3.4	96.6	100.00
Domestic animals	80.7	19.3	100.00
Television Set	67.0	33.0	100.00
Motorcycle	65.9	34.1	100.00

Table 4.17: Responses on Assets Acquired

Source: Primary Data

It can be construed that 20.5% concurred that they were able to purchase land from the income gotten from BodaBoda operations. A small margin of 3.4% revealed that they were able to build permanent house from this business while a big percentage (79.5%) felt otherwise. On the same question of asset acquisition, an overwhelming majority (80.7%) of the respondents stated that they were able to possess domestic animals through facilitation of their BodaBoda business. About 67% of the respondents investigated indicated that BodaBoda business enabled them to own television sets. On the aspect of this business enabling them purchase motorcycles, 65.9% admitted to have owned them through BodaBoda business operations.

4.5.5 Challenges Encountered by BodaBoda Operators

Several challenges were identified by BodaBoda operators and these included: lack of enough packing space, harassment from officers of the county government, traffic jam, insufficient funds to expand, police arrests, insecurity, high cost of maintenance, high cost of fuel, reckless driving by matatu drivers, harsh weather conditions, economical changes, poor city planning, lack of BodaBoda SACCOs, inadequate funds to acquire driving licenses, little knowledge on safety, competition in transport industry, and corruption.

4.5.6 Overcoming Challenges of BodaBoda Operators

The respondents who were interviewed were further asked to state the appropriate ways in which their challenges might be overcome. The mentioned several ways including: provision of more packing space, construction of more roads, ensuring road safety, formation of BodaBoda SACCOs, improving security, stiff policies to regulate high fuel prices, provision of heavy jackets and reflectors at affordable prices, government to avail interest free loans, improved planning in the city, launch the use of trackers in case of theft, as well as establishment of more road safety programmes.

4.6 Regression Analysis

This section focused on estimation of how the predictor variables influenced the dependent variable. The study was used to test the model's goodness of fit. This estimation necessitated in determining the combine prediction made by independent variables on dependent variable used in the study. Therefore, this coefficient of determination (R^2) was used as a ratio of explaining the variation to the total variation; such that $0 \le r^2 \le 1$, and denotes the strength of the linear association between *X* and *Y* (Zikmund, Babin, Carr & Griffin, 2013).

4.6.1 Model Summary

The model summary of a linear relationship between the predictor variables which in this case was NTSA management strategies and dependent variable which was proxied by BodaBoda operations provided an estimated R^2 value of 0.724 as indicated in Table 4.18.

Table 4.18: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	0.851 ^a	0.724	0.721	0.258593

a. Predictors: (Constant), Management Strategies

Source: Primary Data

An implication that the independent variable used in this study can explain 72.4% of the variations in dependent variable. Therefore, the remaining 27.6% is an indication that there are other factors in existence beside NTSA management strategies, which if included in the model, can lead to an improvement. However, the construct used in this study was found to be fit in explaining the dependent variable.

4.6.2 Analysis of Variance (ANOVA)

The ANOVA estimations are as indicated in Table 4.19.

Table 4.19: ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
	Regression	15.113	1	15.113	226.002	0.000 ^b
1	Residual	5.751	86	0.067		
	Total	20.864	87			

a. Dependent Variable: BodaBoda operations

b. Predictors: (Constant), Management Strategies

Source: Primary Data

The ANOVA results provided an *F*- test value of 226.002 and a p < 0.000. An implication that the null hypothesis that NTSA management strategies have no effect on BodaBoda operations is rejected. This would also imply that the possibility of this regression model giving false prediction is 0.0%. According to Rumsey (2011) a small p – value (typically ≤ 0.05) indicates strong evidence and a large p – value (> 0.05) indicates weak evidence.

4.6.3 Beta Coefficients

The regression model tested the effect of the predictor variable on dependent variable where beta coefficients were used to indicate variance relationship while the t – values and p – values were used to determine the significance of independent variable on dependent variable as illustrated in Table 4.20.

Variables	В	Std. Error	Beta	t	Sig.
(Constant)	-0.564	0.133		-4.252	0.000
NTSA Management Strategies	0.798	0.053	0.851	15.033	0.000

Table 4.20: Beta Coefficients

a. Dependent Variable: BodaBoda operations

Source: Primary Data

The results show NTSA management strategies have a positive relationship towards BodaBoda operations in Nairobi City County since the variable provided a significant coefficient value of 0.798, t value of 15.033 and an acceptable p – value of 0.000. This would imply that the more the NTSA management strategies are adopted the higher chances of improving the BodaBoda operations.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the study, findings and conclusion made in relation to the study findings. The chapter also provides the recommendations based on the findings of the study.

5.2 Summary

The research produced a response rate of 88 percent where majority of the respondents were male. Most of the respondents who were interviewed were in the age brackets of 20 - 29 years and 30 - 39 years respectively. In addition, almost a half of the interviewees had post secondary education. An overwhelming majority of the respondents possessed the licenses required for BodaBoda operation and a good number of them had been in operation for a time period of between 2 to 3 years and 4-5 years.

The findings further revealed that an overwhelming majority of those who participated in this research were familiar with the NTSA as a regulatory body, where a high number of them admitted to have knowledge on awareness of the rules and regulations. More than a half of the BodaBoda riders under study were found not to have been involved in accident and for those who had involved in accidents, many of them said that they had been involved in accident just once. Over 50% of the respondents indicated that they sometimes wear the protective gears, while less than a half affirmed that they always wear their protective gears while on the road. About three quarters of those who were interviewed acknowledged that they had received the

road safety training. Over a half of the respondents rated the strategies adopted by NTSA such as road safety education, awareness creation on drivers or riders, registration of vehicle and motorcycles, licensing of vehicles and motorcycles, as well as vehicle certification as being very important for their daily operations.

About three quarters of the respondents acknowledged that their BodaBoda businesses enabled them to meet their living standards, where on average majority revealed that they were able to earn a daily income of between Ksh. 1,000.00 and 1,500.00. It was found out that a sizeable number of the respondents kept records for their respective businesses. On the aspect of asset acquisition, it was revealed that a small number of BodaBoda riders operating Nairobi were able to purchase land from the income gotten from BodaBoda operations. Likewise, a few of them disclosed that they were able to build permanent house from this business. However, an overwhelming majority of the respondents stated that they were able to possess domestic animals from the income they get from their BodaBoda business. On the same note, the study discovered that more than a half of the respondents under investigation said that BodaBoda business had enabled them to purchase television sets. On the aspect of this business enabling them purchase motorcycles, majority admitted to have owned them through BodaBoda business operations.

The findings on inferential analysis show that the relationship between NTSA management strategies and BodaBoda operations provided an estimated R^2 value of 0.724 which implied that these strategies were able to explain 72.4% of the variation in the dependent variable. The ANOVA results provided an *F*- test value of 226.002 and a *p*< 0.000. An implication that, the study should reject the null hypothesis that NTSA management strategies have no effect on BodaBoda operations. NTSA management strategies were also found to have a positive significant relationship

towards BodaBoda operations as the variable provided a significant coefficient value of 0.798, *t* value of 15.033 and an acceptable p – value of 0.000.

5.3 Conclusion

This sub-section draws the study's conclusions in brief based on the preceding chapter of data analysis, Primary Data as well as discussions. The main aim of the study was to investigate the effect of management strategies of NTSA on operations of BodaBoda in Nairobi City County. From the findings in the resulted model, it can be concluded that the business environment from which BodaBoda riders operates seem to be stable with presence of NTSA management strategies. This kind of dynamic condition calls for proper and viable management strategies that can be effectively appreciated by the business operators. However, in cases where the regulatory bodies come up with unfavourable strategies to supervise the transport sector, may lead to them being of little or no effect to recipients at all. This therefore calls for inclusion of all stakeholders in the formulation of these particular management strategies.

The study revealed that some of the BodaBoda operators were not aware of the regulatory body as well as the strategies therein. This could imply that the NTSA management has to improve the modes of sensitizing their clients on their new and existing strategies. This can be done by extending trainings through different channels like radios, cell phones, internet, schools, churches and road signs. Nevertheless, despite the efforts put in by the NTSA authority to create policies and regulate transport industry, there were still challenges identified that affected the BodaBoda riders operating in Nairobi. Therefore, an indication that apart from formulation good working strategies, the NTSA authority should liaise with other partners and

institutions concerned to help in countering some of these challenges facing BodaBoda business within Nairobi City County.

5.4 Recommendations

The study makes the following recommendations:

The study discovered that some of the BodaBoda riders in Nairobi City County did not possess riders' licenses and they had less knowledge about the transport policies and strategies. Therefore, there is need for NTSA to initiate an intensive training which should be a mandatory to all the BodaBoda operators in order to impart knowledge on safety training as well as technical skills required for to operate motor cycle business in Nairobi City.

The BodaBoda operators should be compelled to adhere to road rule and regulations in order to stop or reduce accidents and lose of life. This can be done through sensitization programs which should be instigated by government together with other stakeholders.

Just like their counterparts in matatu business, the government should establish or facilitate formation of SACCOs for all the BodaBoda riders in Kenya. This will make it easy to monitor and regulate them through the SACCO managements.

5.5 Suggestion for Further Research

There is a need for further studies whose data should be based on use of more larger scope, which should comprise of a larger sample size to help in understanding more on how NTSA management strategies affect BodaBoda operations in Kenya. By doing so, the generalization of the results will be justified.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION



APPENDIX II: QUESTIONNAIRE

SECTION A. BACKGROUND INFORMATION OF THE RESPONDENT
1. Gender: Male Female
2. Age of respondent in years
3. Highest level of education.
Primary Secondary Post Secondary
4. Do you have a driving/riders license class G (for motor cycles over 50 c.c. capacity)?
Yes No
5. How long have you been operating as a BodaBoda rider?
Up to one year Two – Three years Four – Five years More than five years

SECTION B. MANAGEMENT STRATEGIES

6. Are you familiar with National Transport and Safety Authority as a body that regulates safety in transport sector?

7. Are you aware of rules and regulations governing transport sector?

Yes	No		
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8. Have you ever been involved in an accident?

	Yes No
9.	If Yes in question 8, how many times?
	One two - three four – five More than five
10.	Do you wear protective gear when on the road?
	Never Sometimes Always
11.	Have you ever received education on road safety?
	Yes No

12. Kindly rate the management strategies/ practices of National Transport and Safety Authority using the following scale; VI = Very important; MI = Moderately Important; IND = Indifferent; MIR = Moderately Irrelevant; VIR = Very Irrelevant; and N/A = Not Applicable or No answer.

	Your scores (Ratings) of NTSA					
Management Strategies	VI	MI	IND	MIR	VIR	N/A
Road safety education						
Awareness creation on drivers/riders						
Registration of vehicles/motorcycles						
Licensing of vehicles/motorcycles						
Vehicle inspection						
Vehicle certification						

SECTION C. BODA BODA OPERATIONS

13. Do BodaBoda operations meet your living stan	idard?	
Yes No		
14. On average, how much do you earn daily? Ksh	ı	
15. Do you keep records of your earnings?		
Yes No		
16. Has your BodaBoda operations enabled you	u acquire the	following assets
(items)?		
Items/Asset	[Yes]	[No]
a. Land	[]	[]
b. Permanent house	[]	[]
c. Domestic animals	[]	[]
d. Television Set	[]	[]
e. Motorcycle	[]	[]
f. Others, please specify		
17. What challenges do you encounter in your bus	iness?	
18. Which way do you think these challenges can	be overcome?	

Thank you very much for your time

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