MANAGEMENT OF PIONEER EASY BUSES LIMITED AND PERFORMANCE OF PUBLIC TRANSPORT IN KAMPALA CAPITAL CITY AUTHORITY

Submitted by:

KWIZERA KENETH

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DEDICATION

This dissertation is dedicated to my entire family, especially my parents, my siblings and to my most treasured friends.

Special thanks to my supervisor Moses Kibrai for enabling me write this research, it would not have been possible without your help.

May God bless you abundantly.

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LIST OF ACRONYMS

AVL Automatic Vehicle and Location

DACCA Driver and Conductors Central Association

EU European Union

KCCA Kampala Capital City Authority

NOTU National of Organization of Trade Unions

PPP Public Private Partnership

UACE Uganda Certificate of Education

UBOS Uganda Bureau of Statistics

UCE Uganda Certificate of Education

UK United Kingdom

UTODA Uganda Taxi Operators and Drivers Association

ABSTRACT

This study sought to establish the effect of management of Pioneer Easy Buses Limited on performance of public transport in Kampala Capital City Authority. The research was guided by the three objectives: To find out the relationship between booking system in Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority, to find out the relationship between time management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority, to find out the relationship between services offered in Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority.

Case study research design was adopted, using quantitative approaches with the help of a questionnaire which helped the researcher to collect data which was later analyzed using SPSS version 16. A sample of thirty (30) respondents filled in the questionnaire for the study and they were all passengers.

The findings revealed that public transport system have no booking system, but they keep time, they have no fixed time of arrival and departure though time is kept, as regards the application service side customers are repeated, increase in passengers on daily basis, services are affordable, and recognize the needs of the poor and requirements of special needs. Some of the recommendations proposed include, the need to establish a booking system, put in place departure and arrival schedules to convenient of customer because most of people usually want to reach in time like students, business people. Pioneer Easy Buses Limited should services by interacting with people asking them their destinations, what people want and the importance.

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This study was centered on the relationship between management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority. It sought to establish the role of Pioneer Easy Buses Limited and its performance in Kampala Capital City Authority. Public transport is an essential tool towards the development of the city.

According to Mohan (2015), transport systems and city character are interlinked. Land use characteristics of a city can determine the type of transport system it needs, and once a transport system is put in place, it influences land use characteristics of the city over time. Therefore, the type of public transport system you want in a city will depend on the vision you have for the future of your city. If an economically vital large central business district exists, it can become the main centre for both employment and retail, and thus contribute to the success of an urban bus system because it can generate and attract trips onto the system (Mohan, 2015). If you want your city to develop as a dense congested city with a large proportion of high-rise buildings and one very large central business district, then you should think of introducing very high capacity transport systems that can carry more than 40,000 people per hour per direction. This can usually be done by use of buses.

According to Litman (2011), high quality bus systems, called Bus Rapid Transit (BRT) can attract high ridership and stimulate transit oriented development (Hidalgo and Carrigan, 2010). Bus advocates argue that bus service is cheaper and more flexible, that buses can be designed to be nearly as fast and comfortable as rail, and that much of the preference for rail reflects prejudices rather than real advantages (Hensher 2007; Cain *et al.* 2009). Bus transit

can serve a greater area, and so can attract greater total ridership than rail with comparable resources, particularly in areas with dispersed destinations. It is argued that rail investments (which tend to benefit higher income people) drain funding from bus service (which tends to benefit lower income, transit dependent people), and so are inequitable, although this is not true if rail projects receive special funding that increases total transit budgets, and some rail lines carry large numbers of lower income riders.

According to Vuchic (1981), public transport is a passenger transport service which is available for use by the general public as a distinct mode. Transport advanced modes include buses, taxis, trains, ferries, airlines. There are distinct differences in urban public transport. In Kampala, the main public transport is by road which is used by most of the people such as business people, tourists and shoppers. Therefore this research will help to bridge the gaps in knowledge of public transport.

In this section, key issues addressed include; background of the study, statement of the problem, objectives of the study, research questions, scope of the study, significance of the study, justification of the study and the conceptual framework.

1.1 Background to the study

According to Neff and Dickens (2013), public transportation in the United States is a crucial part of the solution to the nation's economic, energy, and environmental challenges helping to bring a better quality of life. Increasing numbers people are using public transportation and local communities are expanding public transit services. Every segment of American society individuals, families, communities, and businesses benefits from public transportation.

In addition "Public transport in Hong Kong is dominant for passenger movements, and by international standards is fast, efficient, cheap to use and comfortable. Transport services are

provided by the bus corporations and private sector, and they operate profitably. Government is responsible for the co-ordination of the different modes, and has been successful in regulating the system. Public transport is any form of transport that charge set fares, run fixed routes and is available to the public in form of buses, subways, ferries, taxis, trains and passenger planes." (Trade and Industry Department, 2015).

According to Uganda Travel Planner report (2013), there has been increased prosperity which is significantly led to an increase in the number of vehicles on the road. The most dramatic increase has been seen in mini bus taxes. Taxis are the most popular mode of transport, they go everywhere and they carry up to fourteen passengers. Usually white Toyota mini buses are with checked blue horizontally around the body (Transport Trip Advisor, 2013). Uganda has a unique transport system which controlled by Ministry of Works and Transport of the republic of Uganda. In most countries, public transport is between government and the private sector to ensure accountability of service provision. This is take to be more than a mere business venture, but a service offered on the common good principle often enjoying subsidized fuel, terminals, tax holidays to keep rates low, but in Uganda it is an expensive venture.

According to Stewart (2012), in order to appreciate the present public transport, a historical analysis in Uganda is necessary. At first Uganda was dominated by buses as the public transport in Kampala using operating time table and pre fixed stages but later on towards independence taxis were oriented in the business and eventually this marked the beginning of taxis, public transport should be run under the auspices of PPP (Private Public Partnership). You cannot subject public transport to full private ownership or market price because service providers will pass this cost to an end user who will suffer high costs (Musand, 2012). Private companies alone cannot solve public transport problems in Kampala. Government will have

to get involved both as a regulator in terms of putting in place policies to oversee public transport and support private companies as well.

Furthermore since government left the public transport services in the private hands who aim at profit making, transport service projects that seek to make transport cheaper and more accessible have closed because it tends not to make business sense. Development and management of public road transport are prerequisites for rapid economic growth and poverty reduction as they influence production costs, employment creation access to markets and investment (John, 2013).

Public transport is important and much needed in Kampala Capital City Authority. This study set out to show what the management of Pioneer Easy Buses Limited can contribute to public transport in Kampala Capital City Authority.

1.2 Problem statement of the study

Despite the fact that there are other bus companies, an experiment was attempted by (KCCA) in 2012 to decongest the roads by allowing the transit buses owned by a private company venture. This arrangement created a semblance of order on the Kampala roads. The fixed rates, defined stopovers and automated doors and automated payment systems of the Pioneer Easy Buses Limited experiment were a refreshing encounter for many commuters in Kampala. But accumulated taxes and high banking interest rates from which the buses were acquired, put the Pioneer Easy Buses Limited transit buses out of business 12 months later (National Academies, 2012).

According to Public report (2010), the problem is that there are so many taxis on Kampala's narrow roads and that volume is growing every day causing congestion, accidents. There is no fixed fare and No operation time tables, fully loading the minibuses prior to departing

from the taxi parks causes' difficulty to those intending to get in at other designated stops, even at locations near the taxi parks. Conductors are harassed by stage managers' introduction of buses improved traffic jam. "Congestion in the city results in strikes, confusion putting activities at a standstill," John Ndyomugyeni, the national chairman (UTODA). Ndomugyeni observed a more orderly mode of transport would help solve the problem in the short run as we look for a long term solution.

According to Gatta and Marcucci (2007), the transit industry's woes are due several factors that include the lack of professionalism by those that run such ventures and absence of adequate feasibility studies. "Investors take on such ventures with limited capital investment without realizing that public transport should be a large investment."

According to Hobart (2010), the pre-feasibility studies for the development of a long term integrated bus rapid transit system for greater Kampala metropolitan area conducted by the World Bank in conjunction with Kampala Capital City Authority released a report in 2010 pointing to the Bus Rapid Transit as the appropriate technology for the efficient and effective movement of passenger volumes because of its ability to handle the excess of some 6,000 passengers per peak hour on different routes.

1.3 Broad objective of the study

To establish the relationship between management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority

1.4 Specific objectives of the study

The specific objectives were to;

 To find out the relationship between booking system in Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority

- ii. To find out the relationship between time management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority
- iii. To find out the relationship between services offered by Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority

1.5 Research questions

- i. What is the relationship between booking system in Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority?
- ii. What is the relationship between time management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority?
- iii. What is the relationship between services offered in Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority?

1.6 Scope of the study

1.6.1 Geographical scope

The researchers study was conducted in central Uganda Kampala Capital City Authority in the centre.

1.6.2 Subject scope

The study intended to find out the management of Pioneer Easy Buses Limited and its performance in Kampala Capital City Authority in terms of effectiveness, efficiency, and costs. Activities of Pioneer Easy Buses Limited are under scrutiny are: how do they carry passengers from one place to another, do they provide quality services, do they ensure good time management, do they have proper booking system in as far as serving clients is

concerned and so many others are examined and their impacts on the organizational performance.

The research specifically concentrated on Pioneer Easy Buses Limited as the case study and its involvement in customer management like satisfaction, cost effectiveness, efficiency, management billing and innovation, advancement in technology.

1.6.3 Time scope

It was a short term cross sectional study, data collection, analysis and presentation of results was for a single period.

1.7 Significance of the study

The study is important as it comes at a point in time when transport performance is of widespread concern in both developed and developing countries. A study of the current approaches to management of Pioneer Easy Buses Limited is needed to establish the perception of passengers to the cost effectiveness, customer satisfaction and efficiency. Unless sufficient attention is given to solve the public transport in Kampala, intended services may fail to be delivered to the public's satisfaction.

The study is significant to the stake holder like the share holders and management of Pioneer Easy Buses Limited as well as public transport sector in government, Kampala Capital City Authority, Drivers and Conductors central association (DACCA), United Taxi Operators and Drivers Association as it seeks to find a solution to effectiveness, efficiency after getting the problem.

The study will benefit as regards the passengers satisfaction of the transport with efficiency, effectiveness in getting to understand what they want and help them in implementing the solution.

The study acts as a basis for policy in organizing public transport in the city centre and which methods to use in improving public transport.

The study recommendations will help other people also who would like to make more research about public transport of Pioneer Easy Buses Limited and its performance in Kampala Capital City Authority.

The study will help the researcher to expand or widen the knowledge in the area of study and especially on how to start up or manage a business in relation to public transport because of the opportunities associated with making research plus.

1.8 Justification of the study

According to Patrick (2013), given the complaints of the customers, that is, the business people, officers and the general population that use public transport who are always complaining about poor transport that is not comfortable, takes them long to reach its destination and subsequently leading to slow growth in the economy. Strikes by the taxi drivers and conductors led to occurring leading to some peoples late coming and absenteeism at work hence business people making loses.

According to Stewart (2015), one of the main challenge is abrupt increase of fares almost every time that is in the morning, lunch and evening time. The others challenges include increasing number of Pioneer Easy Buses Limited, and taxis in the city hence increase In traffic jam in some areas of Kampala, poor customer care to the users, poor mechanical conditions of some buses hence slowing down their travel to and from the city and this study seeks to address these challenges in order to improve on performance of public transport in the city of Kampala.

1.9 Conceptual frame work

Conceptual frame work source: (Gatta and Marcucci, 2007)

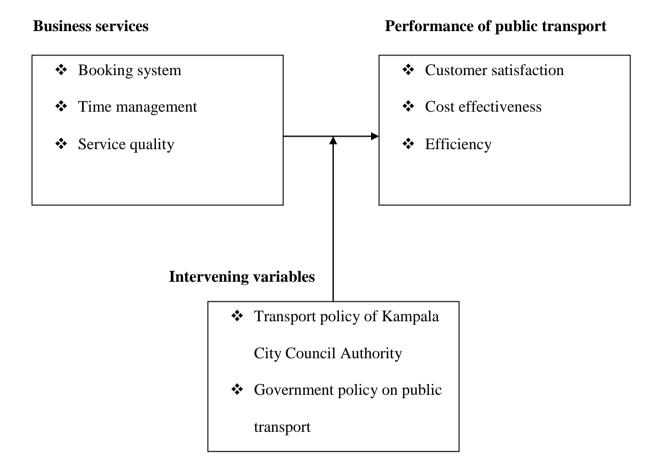
Government policy: The issue of quality is debatable. Although it is recognized as a key management tool, it still remains a fairly subjective concept. Quality is often related to the notion of standards, but in many cases the existing standards are linked to performance determinants which are not very important for the customer.

According to Mutabazi (2012), Uganda like most African countries is experiencing exponential urban growth and expansion at a very alarming rate. According to the Uganda Bureau of Statistics (UBOS), rural urban migration has more than tripled in the last decade. The capital city Kampala receives the highest number of people who migrate from rural areas to the city in search of jobs and better social and economic services. Whereas city municipalities, towns, and trading centers are expanding, transport and urban mobility within these metropolitan areas have not been expanded to match the population increase. Roads are narrow which leads to congestion and traffic jams.

Transport policy of Kampala city: Integrated Transport Planning Limited has been appointed to undertake a Pre Feasibility Study for the Development of a Long Term Integrated Bus Rapid Transit System for Greater Kampala Metropolitan Area. This is intended to support Kampala Capital City Authority's vision for the City as "secure, economically vibrant, well managed, sustainable and environmentally pleasant City that anyone would enjoy visiting and living in." Bus Rapid Transit is a high quality bus based transit system that delivers fast, comfortable, and cost effective urban mobility through the provision of segregated right of way infrastructure, rapid and frequent operations, and excellence in marketing and customer service. It enhances personal mobility both through reducing travel time, and hence also its cost of provision, by improving the travel experience, and use of appropriate technology for

the efficient and effective movement of passenger volumes in excess of some 6,000 passengers per peak hour and direction, and can still handle five times that flow with appropriate specification and design.

Figure 1: Conceptual frame work



In conclusion, the better management of Pioneer Easy Buses Limited is a necessity for the organization for sustainability of public transport system since its demand are already appeared on the main arterial corridors in Kampala, and rapid growth will bring others competitors into consideration within the planning horizon (Integrated Transport Planning, 2010).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In this chapter, works of the various authors and researchers were summarized and emphasis was put only on the review of relevant literature to this study. Areas to be covered included the work of the various researchers which relates to the objectives of this study. This researcher also identified the gaps in the past researchers' work which the study intended to fill.

2.1 Business services

According to Tseytin *et al.* (2006), this fact filled report provides an overview of the benefits that public transportation brings to individuals, communities and our nation as a whole. Public transit's broad reach extends to all of America's communities, large and small, as it helps refresh business districts, allows employers to tap into larger workforces, builds economic revenues and increases property values. On the national level, public transportation supports America's goals and policies, including reducing our dependence on foreign oil, and providing critical response in emergencies. On an individual level, public transportation saves money, and provides people with choices, freedom and opportunities.

According to Tyrinopoulos and Aifadopoulou (2008), among the prime goals of all actors involved in the public transport business is the creation of a well organized transit system, within which citizens can find a sufficient level of mobility and satisfy their important need for efficient movement under safe and comfortable conditions. This overall principle entails many significant quality characteristics of the public transport system, such as safety, on time performance, accessibility, efficiency, information provision and many others. The quality in

public transport stems from the ability of the respective operators to manage and to further develop their services. More and more relevant operators and associated bodies (for example, ministries and supervising organizations) worldwide employ quality control programs in order to assess and improve the services provided to the passengers (PORTAL, 2003) (QUATTRO, 1998) (EQUIP, 2000). The backbone of these programs is a variety of quality attributes and indices that assess the levels of the services provided to passengers and the performance of the transportation system (Giannopoulos, 1989).

Furthermore, such programs provide operators strategic tools that enable them to be closer to passengers and adjust the transportation service to their needs and requirements, while the knowledge gained from these programs provide with valuable data and facilitate their decision making process (Tyrinopoulos, *et al.* 2004). In Metropolitan areas with complex transportation systems managed by multiple operators (such as London, Athens, Rome and others), the implementation of quality control programs seems to be an integral part of their business operation. In some major cities, like London and Rome, the quality control is a daily practice (London Buses, 2004). In many cases, the results of this practice define the contract rules between supervising and subsidiary organizations, the scheduling of the transportation system and the decision making process itself. Nowadays, many large and medium size public transport organizations and operators apply quality control systems, accompanied with scientific and technological aid. In the long run, such initiatives may contribute to attract more customers and facilitate the economic viability of transit organizations.

According to Transport and Overview report (2009), the public transport provider play a key role in public transportation. Commuters who take the subway, the bus, or the train benefit from Xerox solutions that streamline the process. Public transport providers can find a complete range of public transport products and systems giving you tailored solutions and long term investment protection. Our system integration experience with fare collection, fleet

management, traveler information, and mobile communications solutions have driven transformations in day to day operations of transit agencies across the globe. The result, are more of effective transportation systems with much greater capabilities for management teams and passengers. By acting as an integrator, the providers unify the overall operation and provide a single point of contact with full responsibility for your programs success. The products, which can be seamlessly integrated into existing environment, are also geared for the requirements of the future. We're continually refining the solutions and bringing new capabilities to the clients to ensure the people using public transit have an efficient, enjoyable transit experience.

According to Transport (n.d.), letting someone else concentrate on the driving means individuals can work or rest en route and arrive fresher and better prepared. Scotland's public transport network is improving all the time, with dedicated bus lanes, express intercity bus services and new and improved rail services offering fast, reliable and less polluting ways to travel. New train services and even brand new lines and stations have opened with more to come in future. On many trains, you'll find at-seat power points and Wi-Fi access great for business travelers while passenger facilities at stations are improving too. Park and Ride schemes are being built across Scotland, making it easier for car users to catch public transport into our cities. That means all benefit from less congestion and faster bus journeys on routes that need fewer vehicles as a result and therefore cause less pollution.

More so buses themselves increasingly provide improved facilities such as Wi-Fi access, comfortable seats, real time journey information at some bus stops and better accessibility. Public transport is often quicker and cheaper than using a car especially in congested urban areas where parking space is limited. Because it causes less pollution and congestion, greater use of public transport has benefits for the environment and our communities too. For businesses and other organizations, developing a culture of preferring public transport to car

use can help: lower business travel costs, reduce the need for expensive parking lots, increase productivity by enabling staff to work en route, demonstrate commitment to protecting the environment. Improving access to your premises by public transport can also help enlarge the pool of available labour and get more customers through your doors (Transport, n.d.).

2.1.1 Booking system

According to Kit (2013), in Australian latest research suggests that 60% of travelers book online when it is available. As a tourism operator, you may therefore wish to enable your website to be booked online. An online booking system is a technology that will: Display your availability in real time on your website and on the selected distributors' websites, Accept payments from consumers on your own website securely and without requiring human interaction, Give you the opportunity to also make your product bookable on a variety of the selected distributors' websites, Update your inventory on your website and on the selected distributors' websites (optional) when a purchase is made. There are many online booking systems available to Australian tourism operators. They are very simple to install and can be much cheaper than custom built systems. What are the benefits to my business?

The online booking system offers convenience as well as opportunities for exposure to new customers. It also means the booking system will automatically update your records without the need for emails and manually entering in guest details. Payment via credit card is processed online and the booking is confirmed with the guest. Online booking systems will save you a lot of time.

Among those advantages, we can highlight the replacing of physical means by information management that, besides speeding up the procedures, allows a better control of the operation, with less effort, consequently resulting in a lower operational cost. The speed in knowing the financial status of a bus route operation is one of the immediate results of the

information management in the automated fare collection procedure. Under this scenario, a cultural change in the transport sector could also be a consequence of such procedure of technological improvement. This shows that the adoption of this new technology is possibly an unchangeable strategy, with clear impacts on the development of new learning areas for the company itself and a direct consequence on the increase of the quality of services provided.

It is not easy to clearly identify the main objective of bus companies when they choose an automatic ticketing system, since that there are multiple possible purposes. Each one has its own priority within specific situations (Vasconcellos, 2007).

According to Oloyede *et al.* (2014), the Online Bus Ticket Reservation System is a web based application that allows visitors check bus ticket availability, buy bus ticket and pay the bus ticket online (Asaa *et al.* 2012). This system is established for all the home/office users after gaining access from the administrator.

According to Invaderzim (2011), Online Bus Reservation System provides bus transportation system, a facility to reserved seats, cancellation of seats and different types of enquiry which need an instant and quick reservation. This system can be used by the users in performing online reservation via internet for their all business purposes. Users can use this program directly on their websites and no need to install it. The use of bus traveling is a large growing business in Nigeria and other countries; hence bus reservation system deals with maintenance of records of each passenger who had reserved a seat for a journey. It also includes maintenance of information like schedule and details of each bus (Shivaji, 2010). Also, we get to know that there are many operations, which they have to do manually. It takes a lot of time and causes many errors. Due to this, sometimes a lot of problems occur and they were facing many disputes with customers. To solve the above problem, and further maintaining

records of items, seat availability for customers, price of per seat, bill generation and other things, we are offering this proposal of reservation system. The reservation system has three modules. First module helps the customer to enquire the availability of seats in a particular bus at particular date, the second module helps him to reserve a ticket and with the third module he can cancel a reserved ticket.

According to Cases (n.d.), advanced technologies, for example internet, smartcard and Smartphone have made significant impacts on transport ticket booking. Almost all airlines, train companies, long haul coach operators and ferry operators now provide online booking. Online ticket booking can significantly save cost for both transport operators and end users. Online ticket booking has a potential to increase usage of a transport mode since online booking is often associated with traveler information services. With increasing market penetration, Smartphone based online booking has been widely used. Smartphone itself can be used as 'ticket' through application of 2-D bar code. Current practices of transport ticket booking will be introduced below. Implementation must consider online payment security and protection of personal data. Security is a key issue for online ticket booking since it will concern usage of security and personal data. Online booking must respect privacy laws even though many online booking websites collect users' personal data for research. By analyzing personal data and purchasing behaviors, important information about consumers' behaviors can be obtained. A booking website may be able to sell such data for profits. However, provision of such data must not violate users' privacy. Moreover, concerning Smartphone applications, ideally the implementation should be able to be used by all main stream operation systems, for example. Apple's IOS and Google's Android at least. If an application is developed, it should be uploaded to main stores, like Apple's application store and Google's Android Market, to enable users download (with or without charging).

Furthermore ticketing is a tool for the implementation of a pricing policy with the consideration of operational, commercial and social objectives. The ticketing system is the translation of fares into concrete means of payment (for the passenger) and fare collection (for the operator). Several types of tickets are used in public transport systems (ticket based price discrimination). In other words, the price depends on the ticket type used. Ticket based price discrimination is price discrimination in its purest form. It makes virtually no difference to an operator's production costs whether a passenger makes a trip using a single ticket, a carnet or a season ticket. Indeed, it costs the same for the operator to transport a student, an elderly or a passenger paying full fare. The use of differential pricing for such tickets is a way to segment the market and maximize revenue 'airline-style pricing'. In public transport, e ticketing systems are not only means of payment but process huge amount of information which offer a large range of possibilities to make public transport easier to use, to manage and to control. They offer as well opportunities to introduce integrated pricing structure that are not easy to implement with traditional payment tools. Electronic ticketing technologies are classified according to the way they are used for payment. The closer the card is to the payment system, the more reliable the transaction is, but the more constraining it is for the user. Therefore, the long-term objective is for the customer to be able to pay for public transport without having to show or validate any card, relying on fully automatic fare payment (Mezghani, 2008).

According to Kumar (2015), the Online Bus Ticket Reservation System is an online application that permits guests check transport ticket accessibility, purchase transport ticket and pay the transport ticket online. This system is made for all the home/office clients in the wake of obtaining entrance from the overseer. Online Bus Reservation System gives transport transportation framework, an office to saved seats, retraction of seats and diverse sorts of enquiry which require a moment and snappy reservation. This system can be utilized by the

clients as a part of performing online reservation through web for everything business purposes. Clients can utilize this system straightforwardly on their sites and no need to introduce it. The utilization of transport voyaging is a huge developing business in Cities and different nations; subsequently transport reservation framework manages support of records of every traveler who had held a seat for an excursion. It additionally incorporates support of data like calendar and points of interest of every. Likewise, we get to realize that there are numerous operations, which they need to do physically. It takes a considerable measure of time and causes many mistakes. Because of this, occasionally a considerable measure of issues happens and they were confronting numerous questions with clients. To tackle the above issue, and further keeping up records of things, seat accessibility for clients, cost of every seat, bill era and different things, we are putting forth this proposition of reservation framework. The reservation framework has three modules. To start with module helps the client to enquire the accessibility of seats in a specific transport at specific date, the second module helps him to hold a ticket and with the third module he can scratch off a held ticket.

2.1.2 Time management

According to Gaulle *et al.* (2013), public transport in the UK is becoming more accessible but to make your journey go as smoothly as possible it is best to plan and prepare. In this guide, we give an overview of bus, coach, community transport, ferry, plane, taxi, train and tram, travel with information about access, journey planning, concessions, assistance, announcements and communication, accessible toilets, loop systems, parking and how to report back or complain. There are travel tips and advice from experienced travelers and a list of useful contacts. All the above is done to ensure time management both on the side of customers and company since time the best resource to utilize on this earth.

Also according to Fetsch and Flashman (1984), too little time and too much to do is a common condition for many of us. Everyday demands or chores seem to engulf the day, leaving little time to pursue those things you enjoy. But you do have choices about how you spend your time. Balancing what you need to do with what you want to do can lead to happiness and success. Many of us complain, "There just isn't enough time in the day!" But the truth is that we have enough time to do what is important in our lives. You can always make time for the people you value and for the activities worth doing. All you need do is become a master of how you use your time. Turning time management skills into habits will take time but what better way to spend it? With the help of this workbook and two or three hours, you can learn valuable techniques for managing your time and your life. By the end of the exercises, you'll know yourself better, have a map of goals for the future, and maybe fulfill a few dreams.

In addition, your ability to manage your time, as much as any other practice in your career as an executive, will determine your success or failure. Time is the one indispensable and irreplaceable resource of accomplishment. It is your most precious asset. It cannot be saved, nor can it be recovered once lost. Everything you have to do require time, and the better you use your time, the more you will accomplish, and the greater will be your rewards. Time management is essential for maximum health and personal effectiveness. The degree to which you feel in control of your time and your life is a major determinant of your level of inner peace, harmony, and mental well being. A feeling of being "out of control" of your time is the major source of stress, anxiety, and depression. The better you can organize American Management Association and control the critical events of your life, the better you will feel, moment to moment, the more energy you will have, the better you will sleep, and the more you will get done (Fallis, 2013).

According to the Transportation report (2003), the true reason for implementing our solutions is for the benefits of passengers. Building a consistent public transportation system where passengers can trust its reliability will result in increased ridership. Passengers will get tons of benefits related to their finances, time management. Time sharing option mobile's global positioning system vehicle tracking and fleet management solutions tailored for the public transportation industry provide a high level of monitoring capabilities with up to the minute location information frequencies. Cities, counties, and any other entity with public transportation vehicles will be able to monitor and track in real-time while providing location information to the passengers. A wide variety of installation options for the GPS vehicle tracking devices are available. The focus and goal of our public transportation solutions is to provide entities with an advanced and reliable platform so they can provide passengers with an advanced and reliable transportation experience. This part of our public transportation solutions does exactly that! It gives entities access to a complete fleet management and dispatching platform where they can monitor public vehicles, their activities, key events that trigger automated alerts and much more to assure all operations are always running smoothly.

According to Caulfield and Mahony (2009), real time public transit information is an individual specific travel demand management tool that is used to facilitate individuals while planning their public transit trips. The provision of such information has been shown to encourage individuals to examine their public transit options and choose the service that meets their requirements.

The public transport system in Dublin consists of a large bus network, two light rail lines, and a heavy rail network. At the time of this study, there was no single source of public transit information on all modes of transit available in Dublin. This lack of information can act as a barrier to individuals making integrated public transit trips. Each of the public transit

operators provides a website that contains timetables of all of the scheduled services and the routes provided.

According to Dublin Bus (2007), Dublin Bus in 2004 introduced a short message service called "BUSTXT." This service provides users with the departure time from the terminus of the next three services in either direction when the user sends a message requesting information on a specific bus route. This service is available at a charge of 30c per message. The information provided by this service is not real-time. In the same year, Irish Rail introduced a similar service for urban rail users called "DARTXT." The service works in a way similar to the Dublin Bus service; however, the information provided is real-time information. The cost of the service is 30c per message (Irish, 2007). One of the main motivations for this research was to examine what information individuals require while waiting at their transit stop or station. Given that the cost of investment in providing real time information is so large, it is important to understand what information individuals require. This research examines individuals' preferences for accessing real time public transit information. To measure these preferences, a stated preference study was conducted to ascertain how respondents would value the introduction of several methods of public transit stop information.

Guidebook and Litman (2011), special consideration is needed when evaluating transit travel time costs, including the relative speeds, unit costs (cents per minute or dollars per hour), and factors such as whether transit travel reduces the need for motorists to chauffeur non-drivers or spend special time exercising (Litman, 2008). For more discussion see "Is Transit Travel Slow and Inefficient?" later in this report. Various studies indicate that consumers place a higher cost on time spent driving, particularly in congestion, than the same amount of time spent as a passenger in pleasant conditions (that is to say, uncrowned, a comfortable seat, clean and safe vehicles, not too noisy), because passengers experience less stress and can rest,

read or even work. According to current travel time cost values, passengers' travel time is charged at 35% average wage rates, while drivers' time is charged at 50% of wage rates, with a premium of 33% for level of service. Although different agencies assign different values to driver and passenger time, there is little disagreement among experts over the basic concept that, for an average consumer, time spent driving in congestion incurs a higher cost than the same amount of time spent as a comfortable passenger.

2.1.3 Services quality

According to Gatta and Marcucci (2007), Public authorities and transport operators are both involved in the provision of public transport services. There is a contrast between the social goals of the former and the private ones of the latter. Private firms maximize profits without considering social welfare. Regulation plays an important role especially failing competition. Service contracts are the natural method to set bilateral commitments. A contract between the authority and the operator constitute the instrument to induce firms in naturally non-competitive markets to act in line with social targets. Only in a few countries in Europe, the relation between authorities and transport operators are not regulated by a service contract.

According to Mazzulla and Eboli (2006), generally, transit agencies have given too much importance to saving money at the expense of service quality levels; therefore they have essentially focused on cost efficiency and cost effectiveness. A measure of cost efficiency is typically defined as produced services (for example, vehicle kilometers), while a measure of service effectiveness is defined as consumed service (for example, passenger kilometers) However, transit agencies actually have an interest in obtaining a high service quality level, taking into account passengers priorities and requirements (Bertini and El-Geneidy, 2003). For this reason, the necessity of using techniques to identify the importance of service quality attributes on global satisfaction and to assess service quality, increases. In the literature there

are many techniques for measuring service quality and customer satisfaction, for public transport as in other service industries. These techniques are based on customer evaluation. The evaluation of service quality and customer satisfaction can be obtained according to different methods: by asking customers the perception/satisfaction on service quality, by asking the expectation/importance, or by asking both perception and expectation; in addition, perception can be compared with the zone of tolerance of expectations (the range defined by the maximum desired level and minimum acceptable level of expectations). A rating or ranking of individual service attributes can be asked to customers.

According to Eboli and Mazzulla (2007), over the last few years, companies have gradually focused on service quality and customer satisfaction. This strategy is very profitable for both companies and customers, particularly for transit agencies and passengers. An improvement of the supplied service quality can attract further users. This fact could resolve many problems (for example, helping to reduce traffic congestion, air and noise pollution, and energy consumption) because individual transport would be used less. For this reason, the development of techniques for customer satisfaction analysis is neck Journal of Public Transportation, These techniques allow the critical aspects of the supplied services to be identified and customer satisfaction to be increased (Cuomo, 2000). This research explores the relationship between global customer satisfaction (that is to say, passenger satisfaction about overall service) and service quality attributes, based on needs and expectations expressed by the customers of public transport services.

In addition there is structural equation, the structural equation modeling model is proposed. SEM is useful to researchers as a multivariate technique combining regression, factor analysis, and analysis of variance to estimate interrelated dependence relationships simultaneously. SEM was adopted in several fields of research and generalized (Joreskog and Wiley, 1973). Some applications were proposed, for example, in the fields of psychology and

social science (MacCallum and Austin, 2000; Muthén *et al.* 2006), natural science (Mitchell, 1992; Grace and Pugesek 1997), and especially in economics and statistics (MacLean and Gray, 1998; Eskildsen and Dahlgaard, 2000; Boari, 2000; Manaresi *et al.* 2000). Some authors proposed SEM applications in public transport (see, for example, Bamberg and Schmidt, 1998; Fillone *et al.* 2005; Tam *et al.* 2005). Specifically, SEM was adopted for describing customer satisfaction in public transport services (as an example, see Andreessen, 1995; Karlaftis *et al.* 2001).

The model proposed in this article investigates the impact of bus transit aspects on global customer satisfaction. The service analyzed is habitually used by University of Calabria students to reach the campus from the urban area of Cosenza (southern Italy). To calibrate the model, data collected in a survey addressed to a sample of students were used. This article begins with an introduction to a theoretical framework of structural equation models. Next, the experimental survey is described and the statistical descriptive analysis of the sample is reported. The last section describes the general structure of the proposed model and presents the model results.

According to Beirão and Cabral (2006), public transport systems need to become more market oriented and competitive. This requires an improvement of service quality, which can only be achieved by a clear understanding of travel behaviour and consumer needs and expectations. Therefore, it becomes essential to measure the level of service in order to identify the potential strengths and weaknesses of public systems. This can provide clues to public transport management in the process of evaluating alternative service improvements aimed at enhancing user satisfaction and increasing market share. The need to improved service quality contributed to changing public transport. This has occurred in a number of European countries at a legal and organizational level. During the last decade contracting and

competitive tendering have spread, being an important feature of the reform of organizational frameworks in European public transport, Van de Velde.

According to Policy Advice Notes (2009), to make public transport services more attractive and thereby reduce car use, cities as well as public transport companies should be keen to ensure a high quality of service on the public transport system, amongst others, by implementing the following measures: Widening and simplifying the public transport network for example by; Redesigning the network layout, Enhancing the frequency and operating Hours, Introducing Demand Responsive Transport, which is a public transport service operated on demand only, an example passengers call the bus by phone. Modernizing the infrastructure (especially at intermodal interchanges) and making the entire voyage by public transport more comfortable for example by; Installing high quality waiting facilities (seats, shelters, convenience services), Building secure bicycle stands, park and ride facilities, car sharing facilities, Easing access to stations (examples are pedestrian and bicycle paths, signs, redesign of surrounding space).

According to Friman and Fellesson (n.d.), however, an increase in supply (qualitatively or quantitatively) will not automatically lead to a corresponding increase in demand and satisfaction (Kitamura, 2003). To make sure that investment really attracts both the existing and the potential customers envisaged, knowledge of satisfaction and service performance should provide policymakers and operational managers in public transport with valuable information (Nathanail, 2007). The underlying assumption is that there is a direct link between the actual service and the customer's perception of it. To increase public transport use, the service should be designed and performed in a way that accommodates the levels of service required by customers (Beirão and Cabral, 2007).

However, according to Aifadopoulou (2008), the validity of this assumption has not been proven in previous research. There is some knowledge of how customers perceive public transport. In the literature, aspects such as reliability, frequency, travel time and fare level (Hensher *et al.* 2003), comfort and cleanliness (Eboli and Mazzulla, 2007; Swanson *et al.* 1997), network coverage/distance to stop (Eriksson *et al.* 2009; Tyrinopoulos and Antoniou, 2008), and safety issues (Smith and Clarke, 2000; Fellesson and Friman, 2008) are all known to be important factors in customer evaluations of public transport service quality.

In addition, according to Friman and Gärling (2001), underscored the importance of clear and simple transport information. To meet potential and present customers' requirements, quality investments that really raise the perceived service performance regarding these attributes constitute an important issue (Richter *et al.* 2008a; 2008b). However, in the literature, quality and quality investments are often ambiguously defined, making it difficult to examine the impact of the objective conditions of the transport system on customer satisfaction. Further, Friman's (2004), results indicate that quality investments generally do not generate greater satisfaction. In her study, the respondents judged satisfaction even lower, or unchanged, after the quality initiative. Thus, the question of how the objective conditions of the transport system relate to subjective satisfaction remains.

2.2 Performance of public transport

According to Friman (2009), an effective public transport system is critical for the state's economic prosperity and livability. Melbourne could not function effectively as a city without the current public transport system. In 2009, on a typical weekday in Melbourne, public transport accounted for, 8.4 per cent of the 12.6 million journeys made, 15 per cent of the 113 million kilometers people travelled. Public transport has grown rapidly between 2005 to 2006 and 2010 to 2011. The Department of Transport expects further strong patronage growth over

the next decade driven by a growing population, rising traffic congestion, high fuel prices and lifestyle changes. The major challenges facing government is motorized transport, with its corresponding negative impacts, contributes for a large part in creating an unbalance between the three aspects of sustainable development: economic growth, social progress and environmental protection. A shift towards sustainable modes of transport (for example public and non-motorized transport) will therefore be helpful in the process of redressing the balance. Kampala is suffering from several unbalances in urban development, transportation and live ability. The city has developed unplanned, resulting in a mismatch between housing, employment and services. This puts a strain on the central business district as the sole centre of economic activity. Transportation networks for the different modes have not been able to develop properly, and today the narrow streets of the city are unable to meet the increasing demand in transport, which results in severe congestion with many negative impacts.

According to Eboli and Mazzulla (2015), the transport situation is worsened due to a lack of awareness and involvement, of both the public and politicians. Road user behavior is reckless and careless, traffic education is lacking, and enforcement is scarce and mainly focused on improving motorized traffic flow. Streets and vehicles are often ill maintained, used inappropriately, and inspection is poor due to the dominance of motorized traffic the living environment is. Success experiences from all over the world have shown that the following factors can be key to the success in achieving sustainable urban transport: integration between land use and transportation, and between the different modes of transport; willingness and fortitude of politicians, mayors and governments; quick wins and pilot projects; combining encouragement of desired modes of transport and discouragement of undesired modes of transport; using economic instruments, especially to gain revenue to invest in the transport system; acknowledging non motorized transport as important modes

within the transport system; and a gradual implementation which provides the opportunity to evaluate, and for gaining support.

Also according to Amin (2012), urban land use (also known as spatial planning or urban form) has a big influence and impact on the way transport systems are planned and managed in large cities. Transport systems are largely inefficient because of the failure by the city authorities to adopt an integrated approach towards land use and transport planning. Due to a multifarious and complex land tenure system, the provision of roads and other transport related infrastructure such as parking facilities and bus terminals has become virtually impossible. It also draws lessons from the experiences of the role model cities in Asia. To address key transportation challenges such as rapid motorization and traffic jam, it is critical that land use based strategies such as transit malls, land value capture, constructing high density buildings (both commercial and residential) along the transit lines as well as establishing park and ride facilities are adopted by the urban managers and city policy makers.

According to Anon (2012), in the absence of a replicable and sustainable local funding model, it is critical that an eclectic approach is adopted to fund mass transport. Such a strategy would aim to provide investment incentives such as soft loans, donation of land to be used to build bus terminals and bus driver's training school, formulation of a pro transit policy, removal import tax on buses, provision of bus lanes and provision of capacity building for bus operators, transit regulators as well as the local nongovernmental organizations working on transport related issues. Besides, it is critical to consider public transport as a poverty alleviation initiative. This is because mass transport across the globe is largely used by the carless and poor commuters as well as marginalized people such as women and the youth. International experience also shows that investment in public transport should always be made as part of the entire city investment policy on road construction,

development of settlements/housing, establishment of recreation centers as well as building of schools and hospitals. It is also critical to promote public private partnerships in public transport. Therefore thou transport is doing well is not as it should be doing therefore there is need for serous improvement in very many areas which this research is trying to address.

The measurement of transit performance represents a very useful tool for ensuring continuous increase of the quality of the delivered transit services, and for allocating resources among competing transit agencies. Transit service quality can be evaluated by subjective measures based on passengers' perceptions, and objective measures represented by disaggregate performance measures expressed as numerical values, which must be compared with fixed standards or past performances. The proposed research work deals with service quality evaluation based on objective measures; specifically, an extensive overview and an interpretative review of the objective indicators until investigated by researchers are proposed. The final aim of the work is to give a review as comprehensive as possible of the objective indicators, and to provide some suggestions for the selection of the most appropriate indicators for evaluating a transit service aspect.

2.2.1 Customer satisfaction public transport

According to Kostakis (2009), the results indicated that customers of urban buses in the city of Larissa present a medium satisfaction level but global customers' satisfaction, destination satisfaction and usage frequency satisfaction as well as the factors which affect satisfaction varies according the lines. Moreover, route safety, service of personnel, and service inside the bus constitute the strong points of the company. However, all the above have a common characteristic and that is, the dimension "time" with sub criterion "route waiting time" and dimension "availability" with sub criterion "route frequency" which affect direct customer satisfaction as they are considered to be critical and need immediate improvement.

According to Friman (2009), satisfaction with bus services improved for the second consecutive year, with satisfaction levels increasing by about 2 percentage points to 90.2%, from 88.3% in 2013. Customer service saw the biggest improvement. Most other service attributes, including service information, reliability and comfort, also registered higher satisfaction levels. This could be due to the 550 additional buses that we have injected into the public bus network since the start of the Bus Service Enhancement Programme, to introduce new services and improve existing services.

According to the Traffic report (2013), traffic congestion causes longer travel time, pollution, and high consumption of non-renewable energy resource. Public transport, as suggested as a solution to this problem, is already introduced in Indonesia. There is a wide range of public transport operating in Indonesia, from human powered pedicabs (becak) to minibuses that served citizen's daily travel demand. This wide range of public transport is not effective enough to reduce traffic congestion and sometime become the source of congestion. Becak, non motorized public transport, is served for short-distances trips and for maximal two passengers. When becak operates in busy road, the congestion becomes worse. Ojeks, motorcycle public transport, offer services for slightly longer distances and only serve.

According to the Friman and Fellesson (n.d.), the customer satisfaction survey changes set out in this general circular relate to schedule (bus, train, ferry) services. For total mobility services, the transport agency is contemplating moving to a nationally coordinated survey undertaken periodically (probably every three years). This policy decision is still under consideration, but in the meantime, the Transport Agency is removing any requirement for regional authorities to undertake Total Mobility surveys and report the results to the Transport Agency through regional Transport Investment Online annual achievement returns.

According to Mouwen (2015), in many countries, major investments are being made in public transport systems to make them more competitive vis-à-vis other means of transport, most notably private cars. New services are being developed and old ones are being improved. However, an increase in supply (qualitatively or quantitatively) will not automatically lead to a corresponding increase in demand and satisfaction (Fujii and Kitamura, 2003; Mackett and Edwards, 1998). To make sure that investment really attracts both the existing and the potential customers envisaged, knowledge of satisfaction and service performance should provide policymakers and operational managers in public transport with valuable information (Nathanail, 2007). The underlying assumption is that there is a direct link between the actual service and the customer's perception of it. To increase public transport use, the service should be designed and performed in a way that accommodates the levels of service required by customers (Beirão and Cabral, 2007). However, the validity of this assumption has not been proven in previous research.

According to Khurshid *et al.* (2012), this paper aims to improve the understanding of the drivers of customer satisfaction with public transport. The methodology provides a relevant contribution to the previous studies since it highlights the complex interaction between the level and composition of satisfaction, negative social safety experiences, urban settings, and the public transport mode used. Overall, Public transport users see the service attributes on time performance, travel speed, and service frequency as the most important, followed by personnel/driver behaviour and vehicle tidiness. A generic policy aimed at achieving these attributes may yield favorable results with respect to satisfaction. Further, we demonstrate the influence of differences in customer characteristics on satisfaction. A policy aimed at increasing the service frequency and putting new vehicles into operation will probably lead specifically to more satisfied older people. Customer satisfaction is considered to be the most important factor whether it is meant for a product or a service. In case of failure to satisfy

customers, company will be replaced by others and when industries offering various services, have to be more vigilant because there is a special attitude that plays an important role attracting and retaining the customers. Keeping this in view, the researchers intended to highlight the current issues of transport sector in Pakistan that how service quality effects customer satisfaction.

According to Noor *et al.* (2014), this paper identifies components of satisfaction of public bus service in Kota Kinabalu City, Malaysia. Factor analysis is used to analyze a total of 24 parameters satisfactions of public buses. This study succeeded in developing three dimensions of public bus service attributes a satisfaction in the study area namely comfort, accessibility and safety and found that there is a slight difference in satisfaction between the minibus and bus transit, but users agreed that overcrowded and felt unsafe during the night were among the most significant attributes that affect their satisfaction. Transportation authorities can use these findings as a guide to enhance the quality of life of public transport users in the future. Throughout your keep in Kampala you are certain to cherish Japan's remarkable gift to this country, a large number of run down white Toyota vans. To take a taxi into the city, simply climb onto the side of this street and wait for driver to raise his hand, stop, or honk at you. It feels uncomfortable at first however do not get worried, you are an expat therefore everybody thinks you do not know. Request the conductor (he is the guy who holds the money, leans out of the vehicle to get passengers as well as opens the door in case they are heading to the taxi park.

2.2.2 Efficiency of public transport

According to Holmgren (2013), in a time of increasing concern about global warming and other environmental problems, increased public transport usage is often advanced as part of the solution. In Sweden, as well as in many other countries, public transport is heavily

subsidized and controlled by public authorities (Button, 2010). Subsidization and public control can be justified on theoretical grounds, for the optimal price level and structure result in financial deficits. In other words, left unregulated, the market would provide less public transport at a higher price than the optimal. The goal of transport research should not be limited to theoretical analysis but should include the development of practical tools that may improve the quality of peoples' mobility and their daily life. The improvement of public transport services through efficient service-quality management and benchmarking can be considered a big step towards achieving such a goal. Although quality monitoring and benchmarking of public transport services are two methods implemented largely in some European Union (EU) countries and North America, they are rather new to public transport systems of many countries such as Greece. In these countries, research is crucial to facilitate widespread use of quality monitoring and benchmarking by public transport operators in their daily work.

According to Holmgren (2013), in order to be cost efficient, a producer needs to choose the right mix of inputs, that is to say achieve a locative efficiency, as well as use the inputs in a technically efficient manner, that is to say achieve technical efficiency. Bogetoft and Otto, (2011), therefore changes in cost efficiency could be sought in either change in technical efficiency or a locative efficiency. Due to lack of data on the actual amounts of inputs used by the counties it is not possible to perform a formal decomposition but it is possible to discuss what might be viable candidates as explanations for the development. From the customer's viewpoint, quality is relative and depends upon the objectives, means and results. Benchmarking, on the other hand, is a dynamic comparison based on the idea of improvement and action. Both benchmarking and quality improvement are used in public transport systems. More particularly, a way to improve public transport quality using benchmarking is to identify customers' priorities and needs, measure customers' satisfaction

using appropriate indices, use this feedback to evaluate relevant service parameters, and finally take measures to improve services provided to the customers.

According to Hart and Associates (n.d.), due to shortages of public funds and expanding societal needs, maintaining and improving the performance of public transportation systems are critical for future operations (Kittelson *et al.* 2003). If public transportation is not as efficient as it could be, it provides less service than desirable or requires taxpayers and riders to pay more than necessary. Following this approach, a customer satisfaction survey was conducted in the Metropolitan area of Thessaloniki, Greece, to assess public transport services. Passengers were asked to assess certain system quality attributes in terms of the importance that each attribute has for overall service quality and the user's level of satisfaction with that attribute. Through this survey, necessary quality of service data were collected and used to develop composite factors. Using the composite factors and information about the operational characteristics of the transit system in Thessaloniki's a multinomial logistic model was developed and estimated to provide some understanding of the factors contributing to the overall satisfaction level of customers with public transport service. The rest of the paper is divided into four parts. The first deals with general principles regarding.

According to Zurich and Deb (2008), improving the efficiency of a transit system's subunits is one way to increase overall efficiency. Of course, maximizing subunit efficiency does not necessarily maximize system efficiency. However, overall system efficiency can be increased by correctly identifying subunit inefficiencies, and then improving subunit performance with changes that are consistent with system structures, goals, and constraints. For example, the efficiency of subcontracted service providers could be compared, as could the efficiency of individual bus routes, different rail lines, park and ride lots, rail stations, garages, and par transit operations. If some of the subunits performing a given type of activity are identified as relatively inefficient compared with others performing the same activity, then management

can take action to improve the least efficient ones, thereby improving overall system performance. The challenge lies in identifying and quantifying objective measures that reflect the multiple outputs and inputs common in public transportation.

According to Benefits and Transportation report (n.d.), public transportation reduces overall greenhouse gas emissions without reducing the mobility so vital to our nation's economic health and our citizens' quality of life. The increasing cost of fuel makes driving private vehicles even more prohibitive for many. Public transportation households save an average of \$6,251 every year three and even more as the price of fuel rises. Efficient land use produces results far beyond the immediate benefit of increased use of public transportation. It has the potential to significantly change the way we live and travel, reducing our individual carbon footprints while preserving and enhancing our mobility. Higher densities allow for closer proximity of housing, employment and retail, reducing driving distances and enabling communities to plan for and support alternative travel options. In many central business districts, trips taken for shopping, dining or other non-commuting purposes are often made on foot even by those who drive to work. Higher density development including transit oriented development, multi-use buildings, and compact apartments and office space is more energy efficient and extends public transportation's contribution by integrating it with other sectors of our economy.

According to Anon (2007), public transport is a critical strategic imperative in the Department's service delivery agenda. Over the medium term, the department will implement measures to ensure an effective, efficient, affordable and accessible public transport system in both urban and rural areas through, among others, the implementation of integrated public transport networks, and establishment and strengthening of regulatory entities, acquisition of new rail rolling stock, and development and upgrading of priority passenger rail corridors.

According to Planning and Municipality (2001), the demise of public transportation in South Africa manifests itself in practically every public transportation study. There is continuous debate on the current public transport system, the quality of service, the ageing infrastructure, the rationalization processes, land use patterns, poor subsidy targeting, poor public transport planning, operation and regulations, the funding of the implementation of Moving South Africa, and the need for an integrated public transportation system. Frustration is setting in on skilled transportation engineers and is evident in the number of professional transportation engineers emigrating to Europe, North America, and Australia.

2.2.3 Cost effectiveness in public transport

According to Anon (n.d.), governors can make substantial improvements in the efficiency and effectiveness of transportation services in their states. Current budget constraints are driving states to make better usage of separate transport but extensive transportation networks to achieve multiple goals. Public transportation is often viewed as a solution to congestion, but as a costly and only marginally effective mechanism for serving disadvantaged populations, particularly in meeting their employment needs. Effective state coordination can untangle these transportation webs and provide broader and better transportation access and service without major new transportation investments. Local and regional public transit agencies maintain substantial systems in many metropolitan regions and in some rural areas. Public and private organizations also provide an extensive range of transportation services to meet other needs. These transportation services are largely supported by public funds, but each tends to take place in its own sphere and toward its own purpose, often with limited impact.

According to Litman (2010), policy debates about transportation improvements usually focus on the need for increased resources to fund new initiatives and improve public transit and highway infrastructure. However, a growing number of states are using coordination to increase mobility and create a more seamless transportation system without major new investments. Greater coordination between public transit and ancillary transportation programs frees up sufficient resources to substantially improve overall public transportation service delivery. The comparison of the cost and efficiency for transportation services before and after coordination, a study by the Community. Transportation Association of America presented case studies from five states that showed average reductions of 50 percent in passenger-trip costs and 28 percent in vehicle-hour costs after coordination activities were implemented.

According to Case (n.d.), high quality public transportation (convenient, comfortable, fast rail and bus transport) and transit oriented development (walkable, mixed-use communities located around transit stations) tend to affect travel activity in ways that provide large health benefits, including reduced traffic crashes and pollution emissions, increased physical fitness, improved mental health, improved basic access to medical care and healthy food and increased affordability which reduces financial stress to lower-income households. Traffic casualty rates tend to decline as public transit travel increases in an area. Residents of transit-oriented communities have only about a quarter the per capita traffic fatality rate as residents of sprawled, automobile dependent communities. Public transportation service quality can affect mental health in various ways. High quality public transit can reduce emotional stress by improving people's access to education and employment activities (and therefore their long-term economic opportunities), improving community cohesion (positive interactions among neighbors), improving access to social and recreational activities (and therefore their positive social interactions and physical activity), and by reducing insecurity and crowding at

transit waiting areas and in transit vehicles (Allen, 2008; Appleyard, 1981; Bell and Cohen, 2009). Increased neighborhood walk ability is associated with reduced symptoms of depression (Berke, et al. 2007). Many commuters find high quality public transit travel less stressful than driving (Wener and Evens, 2007). These mental health benefits are difficult to quantify but potentially large (By et al. 2015). Speaking before 2,600 delegates at the American Public Transit Association's Annual Meeting, President James E. Carter Jr. said that "better mass transit will help us attack a whole range of critical, interrelated problems, not just energy but also inflation, unemployment, the health of our environment and the vitality of our cities."

According to Moses et al. (2015) as indicated above, public transport is the thread that ties together many aspects of modern existence. People depend on it, and they often spend a significant proportion of their income on it. Clearly, it is paramount to get it on the right footing. The MSA project established that, measured against specific national objectives for cost, journey time, and public transport usage chronicled in the white paper, the existing urban public transport system exhibits significant performance gaps, particularly with regard to the needs of key customers groups. However, there is no doubt that in a developing economy context has in efficient and effective public transport system that is the key to a cost effective and sustainable circulation system in public transport. Evidently, there is a strong link between achieving this end and, the introduction into this matrix, of technology based and marketing solutions as elaborated elsewhere in this paper. Public transport has an essential role in the economy and community of Northern Ireland. An effective public transport system can improve the: local economy by bringing workers and jobs together; environment by promoting a more sustainable form of transport than the car, which can reduce pollution levels and traffic congestion; and mobility of older people, rural dwellers and those with disabilities.

2.3 Review of literature based on the study objective performance of public transport

According to Dhingra (2011), performance measures are navigation tools that can help public transport authorities and city governments determine where they want to go and how to get there. They have many practical applications including trend analysis, comparisons, target setting, system improvement and incentives for managers and employees. They help identify potential problems and optimal solutions. This document provides examples of successful public transport performance evaluation systems from across the globe, including developing cities that are beginning to explore these systems, and identifies key factors necessary for creating successful evaluation systems. This information will be useful to policy-makers, analysts, and practitioners involved in urban transport planning and particularly public transport planning and provision in cities, in both developed and developing countries. Performance measures are an extension of our personal senses sight, hearing, touch, smell and taste. They are navigation tools that help an organization determine where it wants to go and how to get there. They have many practical applications including problem identification, trend analysis, peer comparisons, target setting, evaluating potential improvements, and incentives for managers and employees (Litman, 2005).

According to Sen *et al.* (2011), there are currently over 200 providers of public transportation services (including large and small urban transit systems, rural transit districts, and specialized transportation providers) in the state of Texas, each representing varying service regions. Many of the providers are struggling to maintain and grow services in an unstable economy, facing limited funding, and needing to provide more service with fewer resources. While some providers have made efforts to coordinate the provision of transportation services, many have discovered that jurisdictional and legislative barriers to developing a truly coordinated system stand in the way. "TxDOT" has attempted to address some of these issues previously.

According to Performance report (2012), bus performance information currently falls short of our expectations for sufficiency and reliability. For metropolitan buses, the department is rolling out an automated bus tracking system, surveys of bus quality and condition, and detailed surveys of passengers' experiences of bus drivers. These should address issues with the reliability of metropolitan bus information. These systems will not apply to regional buses and the department will face the same verification issues highlighted for metropolitan buses in VAGO's 2009 audit of Melbourne's New Bus Contracts. While the department has introduced a rolling program of audits of contractual compliance for metropolitan buses, it has not followed VAGO's previous recommendation to use its contractual rights to examine and verify operators' records of on-time running. The department should apply this recommendation to regional buses. Past performance 14 Public Transport Performance Victorian Auditor General's Report The department needs to design a system for checking the reliability of the information that will soon be reported by regional bus operators.

According to Eboli and Mazzulla (1825), in order to ensuring continuous improvement of the delivered transit services, performance measures are an essential tool for focusing transit agencies on their strategic goals. Performance measures can be useful also for the allocation of funds but, for this aim, a more thorough understanding of the applicability and appropriateness of performance measures to different types of transit systems is necessary (Transportation Research Board, 1994). There is a variety of performance measures developed for describing different aspects of the transit services. Transit performance measures can refer to the passenger, agency, and/or community's point of view. Passenger's viewpoint reflects the passenger's perception of the service. The agency point of view reflects transit performance from the perspective of the transit agency as a business. The community's point of view measures transit's role in meeting broad community objectives. Measures in this area include measures of the impact of a transit service on different aspects

of a community, such as employment, property values, or economic growth. This viewpoint also includes measures of how transit contributes to community mobility and measures of transit's effect on the environment. Perceived performance of a transit service from the passenger's point of view can be defined as quality of service Transportation Research Board (2003b). In order to assess the performance of public transport operators, Public Transport Victoria's transport contracts include thresholds for operators' performance standards. Customer service standards are set out in each operator's Customer Service Charter. These include conditions under which passengers may be compensated if service levels fall below the standards in the charters.

2.3.1 Booking system and performance of public transport

According to Koolstra (1999), in many countries, increasing levels of car traffic have induced scarcity problems on urban roads and freeways. Since it is often not feasible to reduce congestion by increasing the capacity, for instance by increasing the number of lanes per road, the efficiency of capacity usage has become an important question. The 'traditional' way to deal with capacity scarcity is to let users wait for their turn in first in, first out queues. Alternative ways to manage the traffic demand are for instance congestion pricing and special purpose lanes. However, the implementation of slot reservation, the approach analyzed in this paper, would give a completely new dimension to road traffic control. Slot reservation would be a novelty in road transport, but is already common practice in air traffic and rail traffic. Users would no longer have random access to the freeway network if slot reservation were implemented completely; instead they would have to reserve a slot in advance. In this context, a slot is the permission to use the freeway system on one particular route with one particular entrance time. Wong (1997), describes how such a system could be implemented in practice. Seat reservation versus slot reservation systems Passenger seat reservation systems are commonly used in long-distance public transport and a slot reservation system on a

freeway could function similarly. An analogy with seat reservation systems is the possibility to vary the reservation tariff with the demand and the option to distinguish between different qualities of slots.

According to Zhao *et al.* (2009), coming to the end of this journey has been the biggest achievement of my life so far. I have been imagining this day since the first day I started. At times, I felt that I would never arrive at the destination. Now, finally, I am proud that I have made it. Looking back, joy and excitement are mingled with confusion and frustration. Each day of this journey will be among the most valuable memories of my life. There are so many things that I have learned from the people around me. One of the most important of those people is my advisor, Dr. Konstantinos P. Triantis. I have always known how fortunate I am to have him as my advisor. For me, he is an academic mentor. He continually inspires me with his wisdom and all around knowledge. A thousand and one times, his words were like a lighthouse winking in the darkness, giving me hope and courage and leading me to the destination. He has always been willing to listen to me like a thoughtful friend. Whether it was a matter of research or my personal life, whether he was busy or idle, there was not once that he let me go without a satisfying answer. An old Chinese proverb says, He who teaches me for one day is my father for life. Dr. Triantis has been in that sense likes a father and his influence will be long, no words can adequately express my gratitude to him.

According to Mezghani (2008), ticketing is a tool for the implementation of a pricing policy with the consideration of operational, commercial and social objectives. The ticketing system is the translation of are into concrete means of payment (for the passenger) and fare collection (for the operator). Several types of tickets are used in public transport systems (ticket based priced is crimination). In other words, the price depends on the ticket type used. Ticket based priced is crimination is priced is crimination in its purest form. It makes virtually no difference to an operator's production costs whether a passenger makes a trip

using a single ticket, a carnet or a season ticket. Indeed, it costs the same for the operator to transport a student, an elderly or a passenger paying full fare. The use of differential pricing for such tickets is a way to segment the market and maximize revenue.

2.3.2 Time management and performance of public transport

According to Standards et al. (2010), public transportation is probably not the first thing that comes to mind when asked to think of a government service, yet it is indeed an important service that local governments provide. Public transportation helps to move people around efficiently, reducing congestion on our local roads, expressways, and freeways. Public transportation is an important component of creating livable communities. Public transportation services come at a considerable cost, however, and just as the benefits are enjoyed by the entire community, the costs are also borne collectively. Since everyone is invested in the provision of public transit through taxes, it is important to make sure that it is being delivered efficiently and effectively. The subject of this research is to examine how transit agencies can improve efficiency and effectiveness through the use of performance measurement. The American people can be a tax a verse population. The modern politician seems to instinctively gravitate towards a position of lower taxes whenever faced with an election, which is perhaps a reflection of public sentiment. Along with this mantra of cutting taxes, there exists another strong public desire to curb perceived waste in government spending. So not only do we want our government to spend less, but also to spend more wisely.

According to Fallis (2013), it is important to clarify the difference between schedule adherence and on time performance. Schedule adherence refers to the difference between real time and scheduled time of arrivals or departures, usually presented in minutes. On time performance, on the other hand, is a percentage value used to indicate buses arriving or

departing late, on time, or early. Depending on the AVL system and the transit agency, on time performance can be calculated using arrivals, departures, or possibly a combination of both. Automatic Vehicle Location (AVL) systems are computer-based vehicle tracking systems that function by measuring the real-time position of each vehicle and relaying this information back to a central location. AVL systems are most frequently used for fleet management to identify the location of vehicles for a variety of purposes, which includes improved dispatch, operation efficiency, and faster response times to disruptions in service. In addition, data from AVL systems can be collected and stored in a database for use in the monitoring, assessment, and identification of strategies that can ultimately improve the delivery of transit service.

According to Sen *et al.* (2011), this research report creates a framework for mobility management and provides an overview of the many definitions for the term. The report documents federal and state regulations in support of mobility management and describes programs in place in the state of Texas as well as national case studies and best practices. Additionally, the research provides a menu of recommended performance measures that can be applied as appropriate to various mobility management programs and offers suggestions for applied mobility management. One purpose of this research was to determine whether or not performance measures are currently in use for public transit mobility management. At present time, there are no industry recognized performance indicators to measure and monitor performance of mobility management programs. Since mobility management in practice is broader than traditional transit, measures are needed to adequately demonstrate the success of mobility management programs once they have been implemented.

According to Cases (n.d.), the key requirements of AVM fleet management system are the ability to locate a vehicle throughout its journey and to transmit this information to the Control Centre in order to make it available to the operator. Most fleet management system

uses the vehicle location information as a basis to provide several functions. The main components of the AVM system are: AVL Real time monitoring module: it includes all the functionalities that have a real-time impact on the management of the fleet and the information feed toward the passengers, this requires an easy-to-read graphical representation of the real time status of services for the public transport operator, a system for the automatic and manual regularization of services, and interactive communications with drivers (via data and voice); The communication with drivers may be managed automatically (e.g. via precoded messages) or involve direct intervention by the operator (e.g. via voice contact) 3 of 13. RTPI Real Time Passenger Information: location data is fundamental for making available the forecast arrival times at stops, for responding to requests for information from travelers (e.g. via Internet services, Call Centre's, Apps for smart phones, etc), and providing information on-board or on the ground (e.g. display and voice announcement on board, display at bus stops); Service planning module, used for entering the schedule data, the fleet service need to be planned in advance, and operational records can also be used as a basis for future planning of services and planning the regular maintenance of vehicle.

2.3.3 Service quality and performance of public transport

According to Cirillo *et al.* (2011), as contracting of public transport services increases in sophistication, there is a growing focus on an increasing number of key performance indicators that emphasis service quality. Although contracts won under competitive tendering or by negotiation are assessed on a number of evaluation criteria, cost efficiency still remains the main basis for selecting a preferred operator. There has been a limited effort to identify the service quality influences that really matter to users of public transport. Ways of incorporating the packaging of service quality offer an improved and behaviorally richer way of representing the role of underlying dimensions of quality in establishing how well a contracted service is delivering services to satisfy customers. In this paper we present a way

of doing this using a construct called a Customer Service Quality Index, in which a stated preference survey together with actual experience in using public transport is used to obtain preference weights for each significant attribute defining service quality, and which is used then to establish a CSQI for each sampled user, and by aggregation, the performance on service quality of each operator.

According to Dhingra (2011), performance measures are widely used in transport planning. They can have various names including, "sustainable transportation indicators", "performance indicators" or just "transportation statistics". Regardless of what they are called, every jurisdiction and agency should develop an appropriate set of statistics that are collected consistently, suitable for planning and evaluation purposes (specific guidance on this is provided in the last section of this paper). Performance measurement can support public transport planning in many ways. It allows transit planners and operators to determine if resources are used efficiently and equitably, identify potential problems, and to verify whether a particular improvement strategy achieves its predicted targets. It paves the ways for course correction which translates into a constant effort at improving services to match the standards. Public transport performance evaluation can reflect various perspectives. Many commonly-used public transport performance indicators such as load factor and cost per vehicle kilometer, measure operating efficiency. Other indicators, such as rider comfort, travel speed and reliability, affordability, integration and satisfaction, reflect the user experience. User-oriented indicators are important for developing public transit systems that respond to user demands and so are able to attract even choice riders. This is an area that needs serious attention in most developing cities today.

According to Eboli and Mazzulla (1825), the measurement of transit performance represents a very useful tool for ensuring continuous increase of the quality of the delivered transit services, and for allocating resources among competing transit agencies. Transit service

quality can be evaluated by subjective measures based on passengers' perceptions, and objective measures represented by disaggregate performance measures expressed as numerical values, which must be compared with fixed standards or past performances. The proposed research work deals with service quality evaluation based on objective measures; specifically, an extensive overview and an interpretative review of the objective indicators until investigated by researchers are proposed. The final aim of the work is to give a review as comprehensive as possible of the objective indicators, and to provide some suggestions for the selection of the most appropriate indicators for evaluating a transit service aspect

According to Anderson *et al.* (2013), although convenience is not necessarily synonymous with service quality, for simplicity, we use the term "convenience" in this paper to encapsulate both the wider scope of convenience as well as attributes of service quality. This is consistent with the scope of service quality defined in the two European Standards created to help define service quality, which covers all attributes of the public transport service, thereby to be useful and suitable, the public transport service needs to be available to take passengers where they want to go at the time they wish to travel. This is facilitated by access and egress via helpfully placed and available (occurring) boarding and alighting points, and a network, timetable and operating hours fitting with activities which give rise to travel demand. A suitable service must also be reliable, punctual, and provide an appropriate level of comfort.

According to Mahmoud *et al.* (2011), transport stakeholders face many challenges in providing transit services that satisfy customer demands. Three main obstacles have been identified both in the transport literature and governmental publications including traveler behavioural intentions, service quality, and the quality monitoring process. Recently, the focus of public transit service provision has been shifted towards improving the quality monitoring process, prioritizing development schemes, and reducing car dependency. In

order to address these demands, different approaches have been proposed using indicator based evaluations of bus service quality. Due to the wide range of indicators associated with this exercise, there is a need to define a concise set of bus service quality indicators that can be readily implemented by operators and managers, moreover, to constitute an integrated framework that involves all stakeholders' perceptions and demands under one roof.

According to Beirão and Cabral (2006), in the last decades the levels of mobility have increased substantially in all European countries. This raises concern about increasing car use growth and the implications of this in terms of congestion and pollution. Another important feature to be considered in decision making concerning transport is the current and changing nature of society and lifestyles. It is necessary to promote measures that can reduce private transport dependence and increase public transport use Public transport systems need to become more market oriented and competitive. This requires an improvement of service quality, which can only be achieved by a clear understanding of travel behaviour and consumer needs and expectations. Therefore, it becomes essential to measure the level of service in order to identify the potential strengths and weaknesses of public systems. The need to improved service quality contributed to changing public transport. This has occurred in a number of European countries at a legal and organizational level. During the last decade contracting and competitive tendering have spread, being an important feature of the reform of organizational frameworks in European public transport.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presents a detailed description of research methodology that was used in carrying out the study. It describes the designs methods and techniques that were used in carrying out research. According to Oso and Onen (2008), methodology refers to a detailed procedure was followed to realize the research objectives. Methodology included a description or the research design sampling techniques, instrumentation, data analysis techniques, population sampling strategies data collection methods, instruments and data quality. It comprises of several sub sections which are usually presented in the order given below.

3.1 Research design

This study adopts a case study approach involving a study on management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority.

According to Oso and Onen (2008), a research design refers to the overall plan or strategy for conducting the research. The study was both qualitative and quantitative approach which involved variables statistical procedures while the qualitative approach will mainly involve the use of case study design which is intensive, descriptive and holistic analysis of a single entity. The case study was chosen to study a single entity in depth in order to gain insight into larger cases thus better understanding of the public transport performance. The study performance gave questionnaires to respondents at once without respectively visiting them and also covered a big number of respondents within a short period of time.

3.2 Study population

The study population was 30 people who were used for a study purpose. This referred to the total number of subjects or the total environment of interest to the researcher. This target population was chosen because the population features highlighting of the variable interests.

3.3 Area of study

The study area is Kampala district found in the central part of Uganda. It is as well as Uganda's capital city. It is found in the central division. This was a sufficient choice because the entire source lies there.

3.4 Sample size

The researcher used statistical formulae to compute the sample size of 30 passengers that were interviewed. The statistical formula used was Krejcie and Morgan (1970) with Morgan the table for determining the sample size from given population according to population size.

3.5 Sampling techniques

This study employed satisfied sampling and probability sampling techniques in which they apply convenience, sampling for non probability purposive sampling techniques where the researcher decided carefully who to include in the sample study so as to collect reliable information.

3.6 Data source

The study involved the use of primary and secondary data source. The primary data source involved use of interview guides, observations, questionnaires, reports, government publications, unpublished manuscript sources. The secondary sources like document review, journals, books, news papers, internet to supplement data collected using primary sources.

3.7 Methods of data collection

According to Amin (2005), a questionnaire is a carefully designed instrument for collecting data in accordance with specifications of the research questions and hypotheses. The researchers used questionnaires which involves questions to be answered by the respondents so as to get information from them though some of them are not studied.

According to Mugenda (2003), interview refers to face to face encounters to obtain accurate information through interviews. The researchers interviewed the respective individuals to get the information though some of them will not be willing to give.

The researcher used observation method to the real seen by travelling in the some bus though some it is expensive monetary wise. The researcher reviewed some documents which were written about Pioneer Easy Buses Limited though they are also hard to get.

According to Mathison (1988), this method involves gathering information from documents relevant to study variables. The researcher used this method in reviewing documents containing information relevant to the study to guide him in determining the gap filled by this study. This was used because document analysis is proved to be extremely valuable alternative source of data especially where there is luck of access to research subjects.

3.8 Data analysis and presentation

Data analysis is the process of bringing order structure and meaning to the mass collected data. The researcher described with justifications the way he was coding quantitative and qualitative data that was connected; used statistical package for road transport to ease the quantitative analysis of the data like questions release to be collected. Descriptive statistics was used in tables. Descriptive and inferential statistics like mean, mode, variance, standard deviation will be used.

In quantitative interviews the research conducted and observed what was analyzed by categories according to gender. Verbalism and themes were developed. Questionnaires were analyzed by use of (SPSS) Statistical Package for Social Scientists.

This will enable the researcher to illustrate the performance Pioneer Easy Buses Limited where it is supported or other means should be developed and used or improved.

Reliability

According to Amin (2005), adds that reliability is the dependability or trustworthiness in the context of measuring instrument.

With reliability the researcher analyzed the data for alpha values using SPSS. He also used protesting instruments on few respondents to see whether the people responded consistently.

3.9 Quality control

According to Kathuli and Pals (1993), for quality assurance, the researchers endeavored to attain values of validity and reliability coefficient of 70%. Validity refers to the ability of collecting justifiable and truthful data is relevant. Therefore validity was measured using this formula below.

$$CVI = \frac{Items\ rated\ relevant}{Total\ number\ of\ items} \times 100\%$$

The method above was used because it enabled the researcher to know the extent to which tools such as a questionnaire are free from error and those understand the subject of the matter.

Reliability means that ability of collecting data consistently under similar conditions. The researcher used test-retest reliability multiple forms of similar questions were given to the same group of people twice to ensure consistency of the data.

3.10 Measurements of variables

These are the tools used to for collecting data and how those tools were developed. Management of Pioneer Easy Buses Limited which is my independent variable was measured using the dimensions of how it is owned in the city, how it is governed in the city. The systems and procedures were used in controlling the information of Pioneer Easy Buses Limited management in the city centre. Performance of Pioneer Easy Buses Limited management was also measured by the use of dimensions; customer care which were take care of how the satisfactions are handled, operations were picked on the part if how the day to day working of buses goes on, payment fare were cater for the finance bit of indicating whether is fair or not. It involved the use of a self administered questionnaire, an interview guide and observation as was chosen by the researcher because they enabled collect autodial and perceptual data from respondents.

3.11 Ethical considerations

Before the data exercise the researcher received the recommendation letter from the faculty dean which introduced him to the place of study rather than just walking into the organization and start collecting data without the knowledge or permission from where you are coming from. The researcher was seeking voluntary participation to participate in research work he was to first get the responses.

After the acceptance letter was given to him, he fixed appointments with the respondents from whom he got the data. In case of data confidentiality the researcher tried to seek the consent of every participant; left every record anonymous.

The researcher identified numbers so that the information was traced to any respondent. The researcher introduced himself to the officials mainly in charge of research who introduced

him to the entire organization before starting to collect data. The researcher remained in the organization until the data wanted was collected.

The researcher briefed the officials before leaving the organization officially after data collection

All references of others used in the research is clearly cited and acknowledged.

Conduct was paramount during collection of data.

Organization and smartness was also considered by the researcher when collecting data.

3.12 Study limitations

Time dimensions was not enough to solve data and not able to comprehensively study. But the researcher used both qualitative and quantitative methods to cover a wide are in a short time.

The design of one organization of Pioneer Easy Buses Limited in the city centre only was not enough because here is around the city. But since sampling was used it depicted what others also do.

The report was limited by the difficulties in fixing appointments with some personnel due to busy schedule and this delayed the information but the researcher tried to collect the information as quickly as possible to avoid information delay.

The major limitation of this study was access to information, availability of enough resources, the researcher used several organizations to acquire information and plan for the little resources available for research.

The availability of experts in editing and guidance was also minimal but the researcher used support from friends or organizations to help.

In conclusion, the above methodology used for the study, how the data was collected, managed, and analyzed from the research field work. The chapter also presented research designs as a case study with an in depth description of the area of the study. It also presented the ethical issues in the study and the anticipated limitations and the means and ways how to overcome them.

CHAPTER FOUR

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter presents the research findings, analysis and interpretation in accordance to the study objectives. The data presented in this chapter was based on a sample survey carried out Pioneer Easy Buses Limited passengers. Out of the sample population of 30, 12 were men and 18 were the women who responded accordingly. Descriptive statics have been used to analyse data and frequencies and percentages have been summarised in tables.

4.1 Sample characteristics

The sample characteristics were in terms of gender, age, academic qualifications, and time spent using Pioneer Easy Buses Limited. The table below shows the respondents gender.

Table 4.1: Sex of the respondents

Sex	Frequency	Percentage	
Female	12	40.0	
Male	18	60.0	
Total	30	100.0	

Source: primary data

Table 4.1 above is a presentation of the respondent's gender. According to this table, majority of the respondents are female who made up 60% of the total sample population and only 40% were male.

Table 4.2: Descriptive statistics of age group of respondent

Age group	Frequency	Percentage	
15 – 25 years	14	46.7	
26 - 35 years	11	36.7	
36 - 45 years	2	6.7	
Above 46 years	3	10.0	
Total	30	100.0	

Source: primary data

According to the table 4.2 out of the 30 respondents in the sample, 47% were aged between 15-25 years, 37% were between 26-35 years and only 7% were between 36-45 years, 10% were of 46 and above.

Table 4.3: Education level

Education level	Frequency	Percentage	Percentage	
UCE	6	20.0		
UACE	4	13.3		
Tertiary	3	10.0		
University	17	56.7		
Total	30	100.0		

Source: primary data

According to the above table 4.3, the respondents with academic qualification who have attended O' level UCE as the highest were 20%, A' level UACE were 13%, tertiary were 10%, while university were 57%.

Table 4.4: Duration of using Pioneer Easy Buses Limited

Duration	Frequency	Percentage	
1 year	12	40.0	
2 years	17	56.7	
3 years	1	3.3	
Total	30	100.0	

Source: primary data

According to the above table 4.4, the respondents have used Pioneer Easy Buses Limited for 40% one year, 57% two years, and 3% three years.

4.2 Booking system

Table 4.5: The booking system

Booking System	N	Minimum	Maximum	Mean	Std.
					Deviation
Pioneer Easy Buses Limited has a	30	1.00	5.00	1.5667	.97143
booking system.					
The booking system is	29	1.00	4.00	1.7586	.91242
efficient.					
The booking system is	29	1.00	4.00	1.6552	.76885
effective					
The booking system is	29	1.00	4.00	1.7241	.84077
convenient					
The booking system	29	1.00	5.00	4.2759	1.25062
needs to be changed					

Source: primary data

4.2.1 Pioneer Easy Buses Limited have a booking system

The results present the findings on the booking system for Pioneer Easy Buses Limited. The valid number of respondents were 29 with minimum responses being 1 for all categories and

maximum responses being 5 for Pioneer Easy Buses Limited having a booking system, and booking system needs to be changed and 4 for booking system efficient, effective and convenient. The responses were made on a 5-point scale, Pioneer Easy Buses Limited has a booking system had a mean of 1.5667. This implies that the respondents disagreed with the statement. This can also mean that the Pioneer Easy Buses Limited do not have a booking system and Standard deviation of 0.97143 this means that the respondents presented different responses on this statement. This could also imply that they had different understanding on the statement. Which is in line with Kit (2013), as a tourism operator, you may therefore wish to enable your website to be booked online, they are very simple to install and can be much cheaper than custom built systems.

4.2.2 The booking system is efficient

Table 4.5 presents the results of booking affiance. The result shows that the mean of the respondents' responses was 1.7586 which implies that the respondents disagree with the statement, the booking system is not efficient since the mean is below 3 in the Likert scale which is the region of disagreement. The corresponding standard deviation was 0.91242 indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Which in line with Kit (2013), most problems faced in public transport it's because of not having online business yet online booking systems will save you a lot of time.

4.2.3 The booking system is effective

Table 4.5 represents the results on booking system effectiveness. The results show that the mean of the respondents' was 1.6552 which implies that the respondents disagreed with the statement, since the mean is below 3 in the Likert scale which is the region of disagreement. The correspondent standard deviation was 0.76885 which indicates the variation of

responses, this could be because respondents had varied understanding on the questions asked. Which is in line with Shivaji (2010), Due to ineffectiveness, sometimes a lot of problems occur and they were facing many disputes with customers.

4.2.4 The booking system is convenient

Table 4.5 above results represents the results on whether convenient of booking system in Pioneer Easy Buses Limited, the results show that the mean of the respondents' was 1.7241 which implies that the respondents disagree with the statement since the mean is in the region of disagreement in the Likert scale. The standard deviation was 0.84077 which indicates the variation of responses this could be because respondents had varied understanding on the questions asked. With increasing market penetration, Smartphone based online booking has been widely used. According to Cases (n.d.) in case the system is in place even Smartphone itself can be used as 'ticket' through application of 2-D bar code.

4.2.5 The booking system needs to be changed

Table 4.5 represents the results to change the booking system. The results show that the mean of the respondents' responses was 4.2759 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 1.25062 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked. Because according to Cases (n.d.), ticketing is a tool for the implementation of a pricing policy with the consideration of operational, commercial and social objectives. The ticketing system is the translation of fares into concrete means of payment (for the passenger) and fare collection (for the operator).

4.3 Time management

Table 4.6: Time Management

Time management	N	Minimum	Maximum	Mean	Std.
					Deviation
Pioneer Easy Buses Limited have a	30	1.00	5.00	2.1000	1.12495
time table.					
Pioneer Easy Buses Limited have	30	1.00	4.00	2.4333	1.04000
a fixed departure time.					
Pioneer Easy Buses Limited have	30	1.00	4.00	2.3667	.96431
fixed arrival time					
Pioneer Easy Buses Limited	30	1.00	5.00	3.0667	1.01483
keep time					

Source: primary data

4.3.1 Pioneer Easy Buses Limited have a time table

Table 4.6 represents the results of weather Pioneer Easy Buses Limited have a time table. The results show that the mean of the respondents' was 2.1000 which imply that the respondents disagreed with the statement since the mean is below 3 in the Likert scale which is the region of disagreement. The corresponding standard deviation was 1.12495 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked. Transportation report (2011), Building a consistent public transportation system where passengers can trust its reliability will result in increased ridership.

4.3.2 Pioneer Easy Buses Limited have a fixed departure time

Table 4.6 represents the results to determine whether Pioneer Easy Buses Limited have a fixed departure. The results show that the mean of the respondents' was 2.4333 which imply that the respondents disagreed with the statement since the mean is below 3 in the Likert scale which is the region of disagreement. The corresponding standard deviation was 1.04000

which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Fallis (2013), the degree to which you feel in control of your time and your life is a major determinant of your level of inner peace, harmony, and mental well being. A feeling of being "out of control" of your time is the major source of stress, anxiety, and depression.

4.3.3 Pioneer Easy Buses Limited have a fixed arrival time

Table 4.6 represents the results to determine whether the pioneer easy buses have a fixed arrival time. The results show that the mean of the respondents' was 2.3667 which imply that the respondents disagreed with the statement since the mean is below 3 in the Likert scale which is the region of disagreement. The corresponding standard deviation was 0.96431 which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. According to Fallis (2013), time is the one indispensable and irreplaceable resource of accomplishment. It is your most precious asset. It cannot be saved, nor can it be recovered once lost.

4.3.4 Pioneer Easy Buses Limited keep time

Table 4.6 represents the results to determine whether the Pioneer Easy Buses Limited keep time. The results show that the mean of the respondents' was 3.0667 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 1.01483 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked or they could have been in a hurry. Transportation (2011), Passengers will get tons of benefits related to their finances, time management. The true reason for implementing our solutions is for the benefits of passengers.

4.4 Service quality

Table 4.7: Service Quality

Service Quality	N	Minimum	Maximum	Mean	Std. Deviation
Pioneer Easy Buses Limited	30	1.00	5.00	3.2667	1.14269
seats of customers are spaced.					
Pioneer Easy Buses Limited	30	2.00	5.00	3.2667	.78492
cleanliness is the best.					
Pioneer Easy Buses Limited	29	1.00	4.00	4.7241	.61060
have comfortable seats.					
Pioneer Easy Buses Limited	30	2.00	5.00	3.6667	.80230
stop in designated places for					
customers					
Pioneer Easy Buses Limited	29	2.00	5.00	4.0000	.70711
have first aid kits					
Pioneer Easy Buses Limited	30	1.00	5.00	3.0333	.88992
care for their customers					
Pioneer Easy Buses Limited	30	2.00	5.00	3.1000	.95953
have safety measures in case of					
accident					

Source: primary data

4.4.1 Pioneer Easy Buses Limited seats of customers are spaced

Table 4.7 represents the results to determine whether the customers are spaced in Pioneer Easy Buses Limited. The results show that the mean of the respondents' was 3.2667 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 1.14269 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked. And this is in accordance with Govender (2014), the

vast majority (72%) of the passengers perceived finding a seat in a bus as being easy, whereas only 41% of the passengers perceived finding a seat in a mini-bus taxi as being easy.

4.4.2 Pioneer Easy Buses Limited cleanliness is the best

Table 4.7 represents the results to determine whether the cleanliness is the best in Pioneer Easy Buses Limited. The results show that the mean of the respondents' was 3.2667 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.78492 which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. The need to improved service quality contributed to changing public transport and cleanliness (Beirão and Cabral, 2006).

4.4.3 Pioneer Easy Buses Limited has comfortable seats in their buses

Table 4.7 represents the results to determine whether there are comfortable seats in Pioneer Easy Buses Limited. The results show that the mean of the respondents' was 4.7241 which implies that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.61060 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked. Which is in line with Transport report (2011), they are the product of very deliberate choices that have been made to shape our communities around the private automobile.

4.4.4 Pioneer Easy Buses Limited stop in the designated places of customers

Table 4.7 represents the results to determine whether the customers are stopped in designated places. The results show that the mean of the respondents' was 3.6667 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is

the region of agreement. The corresponding standard deviation was 0.80230 which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Referring to American Public Transportation Association (2010), the first point of contact between the passenger and the transit system is the bus stop/shelter. Many factors influence the design and placement of the bus stop/shelter.

4.4.5 Pioneer Easy Buses Limited have first aid kits in the buses

Table 4.7 represents the results to determine whether pioneer easy buses have first aid kits inside. The results show that the mean of the respondents' was 4.0000 which implies that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.70711 which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Which is in accordance with Department of Justice and Attorney General (2014), providing immediate and effective first aid to workers or others who have been injured or become ill at the workplace may reduce the severity of the injury or illness and promote recovery. In some cases it could mean the difference between life and death.

4.4.6 Pioneer Easy Buses Limited care for customers

Table 4.7 represents the results to determine whether the customers are cared for well. The results show that the mean of the respondents' was 3.0333 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.88992 which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Which in accordance with Mosi (2010), found ticket price, punctuality and reliability as the main factors that influence customers' satisfaction in bus transport in Uganda.

4.4.7 Pioneer Easy Buses Limited have safety measures for incase of an accident

Table 4.7 represents the results to determine whether pioneer easy buses have safety measures for in case of an accident. The results show that the mean of the respondents' was 3.1000 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.95953 which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Hence being supported with Swov (2008), the consequences of crashes with public transport vehicles are often far more severe than of other road crashes.

4.5 Customer satisfaction

Table 4.8: Customer satisfaction

Customer Satisfaction	N	Minimum	Maximum	Mean	Std.
					Deviation
Pioneer Easy Buses Limited repeat	30	2.00	5.00	4.2000	.92476
Customers.					
Pioneer Easy Buses Limited	30	2.00	4.00	3.4000	.85501
customers					
Increase daily.					
Pioneer Easy Buses Limited invite	30	1.00	4.00	3.3000	.95231
Others after use					
Pioneer Easy Buses Limited are	30	2.00	5.00	4.4667	.81931
Affordable					

Source: primary data

4.5.1 Pioneer Easy Buses Limited repeat customers

Table 4.8 represents the results to determine whether Pioneer Easy Buses Limited repeat customers. The results show that the mean of the respondents' was 4.2000 which imply that

the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.92476 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked. Hence in support of Proportion *et al.* (2013), transport for Canada surveyed 5,173 bus customers for customer satisfaction.

4.5.2 Customers increase on a daily bases

Table 4.8 represents the results to determine whether there is an increase of customers on a daily bases. The results show that the mean of the respondents' was 3.4000 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.85501 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked.

4.5.3 Customers invite others after use

Table 4.8 represents the results to determine whether customers invite others after use. The results show that the mean of the respondents' was 3.3000 which imply that the respondents agreed with the statement since the mean is above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.95231 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked.

4.5.4 Pioneer Easy Buses Limited has affordable public transport

Table 4.8 represents the results to determine whether the Pioneer Easy Buses Limited are affordable. The results show that the mean of the respondents' was 4.4607 which implies that the respondents agreed with the statement since the mean is above 3 in the Likert scale which

is the region of agreement. The corresponding standard deviation was 0.819131 which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked.

4.6 Effectiveness

Table 4.9: Effectiveness

Effectiveness		Minimum	Maximum	Mean	Std.
					Deviation
Pioneer Easy Buses Limited	30	1.00	5.00	3.8667	1.22428
Recognize the needs of the poor.					
Pioneer easy buses	30	1.00	5.00	3.4000	1.13259
recognize					
Special needs groups					
Pioneer easy buses	30	1.00	5.00	3.7586	.95076
increase					
Mobility and accessibility					

Source: primary data

4.6.1 Pioneer Easy Buses Limited recognize the needs of the poor

Table 4.9 represents the results to determine whether Pioneer Easy Buses Limited recognize the needs of the poor. The results show that the mean of the respondents' was 3.8667, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 1.22428, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked.

4.6.2 Pioneer Easy Buses Limited recognize special needs group

Table 4.9 represents the results to determine whether special needs group are recognized. The results show that the mean of the respondents' was 3.4000, which implies that the respondents agreed with the statement that there is a policy on equipment financing in the bank since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 1.13259, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked.

4.6.3 Pioneer Easy Buses Limited increase mobility and accessibility

Table 4.9 represents the results to determine whether there is an increase in mobility and accessibility. The results show that the mean of the respondents' was 3.7586, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.95076, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked.

4.7 Efficiency

Table 4.10: Efficiency

Efficiency	N	Minimum	Maximum	Mean	Std. Deviation
Pioneer Easy Buses Limited	30	3.00	5.00	4.5000	0.68229
Are affordable.					
Pioneer Easy Buses Limited are	30	2.00	5.00	3.8667	0.73030
Safe.					
Pioneer Easy Buses Limited are	30	2.00	5.00	3.8333	0.69893
Convenient to use					
Pioneer Easy Buses Limited are	30	1.00	5.00	3.2000	1.09545
Fast					
Pioneer Easy Buses Limited are	30	2.00	5.00	3.4333	0.97143
Reliable					

Source: primary data

4.7.1 Pioneer Easy Buses Limited have affordable costs

Table 4.10 represents the results to determine whether the cost is affordable in Pioneer Easy Buses Limited. The results show that the mean of the respondents' was 4.5000, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.68229, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Hence in line with Anon (n.d.), urban public transport is often referred to as mass transit.

4.7.2 Pioneer Easy Buses Limited are safe

Table 4.10 represents the results to determine whether buses are safe. The results show that the mean of the respondents' was 3.8667, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement.

The corresponding standard deviation was 0.73030, which indicates the variation of responses, this could be because respondents had varied understanding on the questions asked and is in line with (Wardman, 2014). It is straightforward that making public transport more convenient raises the probability that it will be chosen over alternative transport modes and can raise overall transport demand.

4.7.3 Pioneer Easy Buses Limited are convenient to use

Table 4.10 represents the results to determine whether Pioneer Easy Buses Limited are convenient to use. The results show that the mean of the respondents' was 3.8333, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.69893, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Which is in line with Wardman (2014), it is less straightforward but crucial to understand how users value convenience compared to other characteristics of service, and to produce operational and measurable indicators of convenience.

4.7.4 Pioneer Easy Buses Limited are fast

Table 4.10 represents the results to determine whether the buses are fast. The results show that the mean of the respondents' was 3.2000, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 1.09545, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. It is in accordance with Moses (2009), moreover, Dutch Railways has launched a mobile travel planner for the train. There are experiments with current travel information on rail and urban and regional transport at railway stations.

4.7.5 Pioneer Easy Buses Limited are reliable

Table 4.10 represents the results to determine whether the buses are reliable. The results show that the mean of the respondents' was 3.4333, which implies that the respondents agreed with the statement since the mean was above 3 in the Likert scale which is the region of agreement. The corresponding standard deviation was 0.97143, which indicates the variation of responses; this could be because respondents had varied understanding on the questions asked. Hence in line with Public transport report (2013), reliability of public transport is important.

4.8 Correlation Analysis

The correlation analysis is an important aspect in this chapter whereby it enables the researcher to find out the significance of the specific objectives stated for this given research and the confidence level between the independent and dependent variable and in this case between the dimensions of Business services and performance of public transport. Correlation is represented by (r) as seen in the tables below.

Table 4.11: Correlation between Business services and performance of public transport

Variables	1	2	3	4
1. Booking system	1			0.386*
2. Time management		1		0.318*
3. Service quality			1	0.384*
4. Performance of public transport				1

Source: Primary Research Data

^{*} Correlation is significant at 0.05 (2-tailed)

4.8.1 Booking system and performance of public transport

As shown in table 4.11 above, there is a positive and insignificant relationship between booking system and performance of public transport in Kampala Capital City Authority (r = 0.386, $p \le 0.05$). The results obtained in the correlation analysis are in agreement with the scholarly works of (Kit, 2013) in Australian Latest research suggests that 60% of travelers book online when it is available. An online booking system is a technology that will: Display your availability in real time on your website and on the selected distributors' websites, Accept payments from consumers on your own website securely and without requiring human interaction, there are many online booking systems available to Australian tourism operators. They are very simple to install and can be much cheaper than custom built systems. What are the benefits to my business? The online booking system offers convenience as well as opportunities for exposure to new customers. It also means the booking system will automatically update your records without the need for emails and manually entering in guest details. Payment through credit card is processed online and the booking is confirmed with the guest. Online booking systems will save you a lot of time.

4.8.2 Time management and performance of public transport

As shown in table 4.11 above, there is a positive and insignificant relationship between credit terms and performance (r = 0.318, $p \le 0.05$). The results obtained in the correlation analysis are in agreement with the scholarly works of Gaulle *et al.* (2013). Public transport in the UK is becoming more accessible but to make your journey go as smoothly as possible it is best to plan and prepare. In this guide, we give an overview of bus, coach, community transport, ferry, plane, taxi, train and tram, travel with information about access, journey planning, concessions, assistance, announcements and communication, accessible toilets, loop systems, parking and how to report back or complain. There are travel tips and advice from

experienced travelers and a list of useful contacts. All the above is done to ensure time management both on the side of customers and company since time the best resource to utilize on this earth.

4.8.3 Service quality and performance of public transport

Findings above, table 4.11 shows that there is a positive and insignificant relationships between client appraisal and performance of commercial banks which is significant at 0.05 level (r = 0.384, $p \le 0.05$). Bertini (2003), the necessity of using techniques to identify the importance of service quality attributes on global satisfaction and to assess service quality, increases. In the literature there are many techniques for measuring service quality and customer satisfaction, for public transport as in other service industries. These techniques are based on customer evaluation. The evaluation of service quality and customer satisfaction can be obtained according to different methods: by asking customers the perception/satisfaction on service quality, by asking the expectation/importance, or by asking both perception and expectation; in addition, perception can be compared with the zone of tolerance of expectations (the range defined by the maximum desired level and minimum acceptable level of expectations). A rating or ranking of individual service attributes can be asked to customers.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary, ions and recommendations on the Pioneer Easy Buses Limited management and performance of public transport in Kampala city basing on the findings from the study. The findings, conclusions and recommendations were to examine the relationship between booking system, time management, service quality and performance of public transport in Kampala Capital City Authority. The data was analyzed inform of tables which were used to test the relationship.

5.1 Summary of findings

5.1.1 Booking system and performance of public transport

From the findings, majority of respondents agreed that there is relationship between Booking system and performance of public transport. Correlation analysis revealed a positive and insignificant relationship between booking system and performance of public transport the online booking system offers convenience as well as opportunities for exposure to new customers. It also means the booking system will automatically update your records without the need for emails and manually entering in guest details.

5.1.2 Time management and performance of public transport

The majority of the respondents agreed that there is a relationship between Time management and performance of public transport. Correlation analysis revealed a strong and significant relationship between Time management and performance of public transport which is significant.

5.1.3 Service quality and performance of public transport

Respondents agreed that service quality has an impact on the performance of public transport in Uganda as seen in above. Correlation analysis revealed a positive and moderately low significant relationship between Service quality and performance of public transport at a level of significance.

5.2 Conclusions on the findings

Booking system has a positive and weak relationship with performance of public transport especially. Thus, basing on the findings of this research, most people would like to use the booking system for convenience.

Time management has a positive and strong relationship with performance of public transport. Thus, basing on the findings of this research, time management has strongly and weak affects performance of public transport.

Service quality has a positive and strong relationship with performance of public transport. Therefore, basing on the findings of this research, service quality positively and weak affects performance of public transport.

Therefore, there is a relationship between management of Pioneer Easy Buses Limited and performance of public transport.

5.3 Recommendations

The public transport should improvise to introduce the booking system.

The public transport should try to keep time that is of departure and arrival because most of people usually want to reach in time like students, business people.

The public transport should find ways of developing services by interacting with people and asking them their destinations, what people want and the importance.

5.4 Suggested areas for further research

From the study findings from the respondents, the researcher thing that there should further research on:

Traffic jam and performance of public transport.

Language and performance of Pioneer Easy Buses Limited.

Fluctuations of prices and performance of public transport.

Developing technology and performance of Pioneer Easy Buses Limited.

REFERENCES

Anderson, R., Condry, B. and Findlay, N., (2013). Measuring and valuing convenience and service quality: a review of global practices and challenges from the public transport sector. Available at:

http://www.internationaltransportforum.org/jtrc/DiscussionPapers/DP201316.pdf. [Accessed June 8, 2015].

Anon, Improving Public Transportation Services.

Anon, (2007). No Title.

- Beirão, G. and Cabral, S. J., (2006). Enhancing service quality in public transport systems. *Urban Transport XII: Urban Transport and the Environment in the 21st Century*.

 Available at: http://library.witpress.com/viewpaper.asp?pcode=UT06-081-1. [Accessed June 8, 2015].
- Benefits, T. and Transportation, P., Public Transportation Reduces Greenhouse Gases and Conserves Energy The facts are clear The Benefits of Public Transportation.
- By, R., Comptroller, T.H.E. and General, A., (2015). DRD: the effectiveness of public transport in Northern Ireland., (April).
- Case, T.H.E.B., in Public.
- Cases, B., Public Transport Fleet Management. Available at:

 http://www.largevents.eu/wp/wpcontent/uploads/2012/10/Public_Transport_Fleet_Management_AVM.pdf. [Accessed
 June 8, 2015].
- Cases, B., Transport Ticket Booking Information.
- Caulfield, B. and Mahony, M.O., (2009). A Stated Preference Analysis of Real-Time Public Transit Stop Information. *Journal of Public Transportation*.
- Dhingra, C., (2011). Measuring Public Transport Performance: Lessons for Developing Cities. *Sustainable Urban Transport Technical Document*, 9(Division 44 Water, Energy, Transport).

- Eboli, L. and Mazzulla, G., (1825). Performance indicators for an objective measure of public transport service quality.
- Eboli, L. and Mazzulla, G., (2007). Service Quality Attributes Affecting Customer Satisfaction for Bus Transit. *Journal of Public Transportation*.
- Fallis, A., (2013). No Title No Title,
- Fetsch, R.J. and Flashman, R.H., (1984). The successful person's guide to time management. *University of Kentucky*.
- Friman, M., (2009). Title.
- Friman, M. and Fellesson, M., Service Supply and Customer Satisfaction in Public Transportation: The Quality Paradox..
- Gatta, V. and Marcucci, E., (2007). Quality and public transport service contracts.
- Guidebook, B.P. and Litman, T., (2011). Evaluating Public Transit Benefits and Costs.
- Hart, J. and Associates, W.S., Comparing the Efficiency of Public Transportation Subunits Using Data Envelopment Analysis.
- Holmgren, J., (2013). The efficiency of public transport operations: An evaluation using stochastic frontier analysis..
- Integrated Transport Planning, (2010). Pre-feasibility studies for the development of a long term intergrated bus rapid transit system for greater Kampala Metropolitan Area: A Final Report., (May).
- K-, P., (2013). Measuring public transport customer satisfaction Public transport customer satisfaction surveys national questionnaire wording., (November).
- Kit, E., (2013). Topic | Online Booking Online Booking Systems 101. Online.
- Koolstra, K., (1999). Potential benefits of a freeway slot-reservation system: Queuing costs versus scheduling costs 1 Slot reservation on freeways.
- Kostakis, A., (2009). Measuring Customer Satisfaction in Public Transportation An empirical study based in urban buses in the city of Larissa (Greece) "The MUSA methodology."
- Kumar, N.S., (2015). Robust and Secure Online Bus Ticket Reservation System.

- Litman, T., (2010). Evaluating Public Transportation Health Benefits 14., (June).
- Mahmoud, M., Hine, J. and Kashyap, A., (2011). Bus Transit Service Quality Monitoring in UK: A Methodological Framework. *Proceedings of ITRN*.
- Mazzulla, G. and Eboli, L., (2006). A Service Quality experimental measure for public transport. *European Transport*.
- Mezghani, M., (2008). Study on electronic ticketing in public transport Contents. *European Metropolitan Transport Authorities*.
- Mohan, D., (2015). Public Transportation Systems for Urban Areas PUBLIC TRANSPORTATION IN LARGE CITIES: STATE OF.
- Mouwen, A., (2015). Drivers of customer satisfaction with public transport services. *Transportation Research Part A: Policy and Practice*. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0965856415001251 [Accessed June 8, 2015].
- Mutabazi, S.S., (2012). A Scrutiny of Transport Planning and Mobility in Towns and Cities., (October).
- National Academies, (2012). Who We Are., 2012(June). Available at: http://www.nationalacademies.org/about/whoweare/index.html. [Accessed June 8, 2015].
- Neff, J. and Dickens, M., (2013). Public Transportation Fact Book.
- Noor, H.M., Nasrudin, N. and Foo, J., (2014). Determinants of Customer Satisfaction of Service Quality: City Bus Service in Kota Kinabalu, Malaysia. *Procedia - Social and Behavioral Sciences*. Available at: http://linkinghub.elsevier.com/retrieve/pii/S1877042814055347 [Accessed September 15, 2015].
- Of, O. and Public, T.H.E., (2010). CURRENT SITUATION AND KEY ISSUES OF THE PUBLIC TRANSPORT SECTOR IN GKMA., (November).
- Oloyede, M.O. Alaya S.M. Adewole, K., (2014). Development of an Online Bus Ticket Reservation System for a Transportation Service in Nigeria. *Computer Engineering and Intelligent System*..
- Patrick, K., (2013). Sustainable transport in Kampala-Uganda.
- Performance, P.T., (2012). Public Transport Performance., (December).
- Planning, T. and Municipality, T.M., (2001). The South African public transportation

- professional., 2020 (July).
- Policy Advice Notes, (2009). Enhancing the quality of public transport services public transport services. *Cleaner and better transport in cities*.
- Stewart, M.S. and Support, S., SCRUTINY OF TRANSPORT PLANNING Introduction and Background.
- Trade and Industry Department, H.K., (2015). Hong Kong: The Facts. *Information Services Department*. Available at: http://www.gov.hk/en/about/abouthk/factsheets/docs/employment.pdf. [Accessed June 8, 2015].
- Transport, P., Public Transport.
- Transport, P. and Overview, G., Public Transportation Solutions Serving people on the move Global Innovative Public Transportation Solutions.
- Transportation, P., (2011). Fact book. Transportation.
- Tseytin, G., Markus, H., Margaret, O. and Lyons, D., (2006). Public Transportation
- Tyrinopoulos, Y. and Aifadopoulou, G., (2008). A complete methodology for the quality control of passenger services in the public transport business. *European Transport* \ *Trasporti Europei*.
- Vasconcellos, S., (2007). Electronic ticketing system: implementation process. *International* Available at: http://thredbo.econ.usyd.edu.au/downloads/thredbo10_papers/thredbo10-themeE-Vasconcellos-Costa.pdf. [Accessed June 8, 2015].
- Vuchic, V.R., (2000). Urban Public Transportation Systems. *Transportation engineering and planning*.
- Zhao, Y., (2009). A Downtown Space Reservation System: Its Design and Evaluation A Downtown Space Reservation System: Its Design and Evaluation 1.
- Zurich, E.T.H. and Deb, K., (2008). Efficiency, Demand, and Pricing of Public Bus Transport in India., (17669).

APPENDICES

APPENDIX I: RESEARCH QUESTIONNAIRE

(To be filled in the passengers who use Pioneer Easy Buses Limited)

Dear Sir/ Madam,

I am **Kwizera Keneth** a student of Uganda Martyrs University pursuing a Bachelor's Degree in Business Administration and Management. I am currently conducting a study on **management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority.** The study is purely for academic purposes and the information given will be treated with utmost confidentiality and a profound manner of professionalism. I therefore, humbly request you to spare some time and answer the following questions;

Note:

a) 1year

b) 2 years

1. This questionnaire has two parts 1 and 2. Please answer all questions. **PART 1** (Tick or write answers in full where applicable). 1. Name (Optional)..... 2. Gender a) Male b) Female 3. Age bracket a) 15-25 b) 26-35 d) 46 and above c) 36-45 4. Highest level of education attained b) UACE a) UCE d) University c) Tertiary 5. How long have you used Pioneer Easy Buses Limited?

c) 3 years

d) Above 3 years

PART 2 (Please tick in the box, in one of the options provided that you think is the most appropriate)

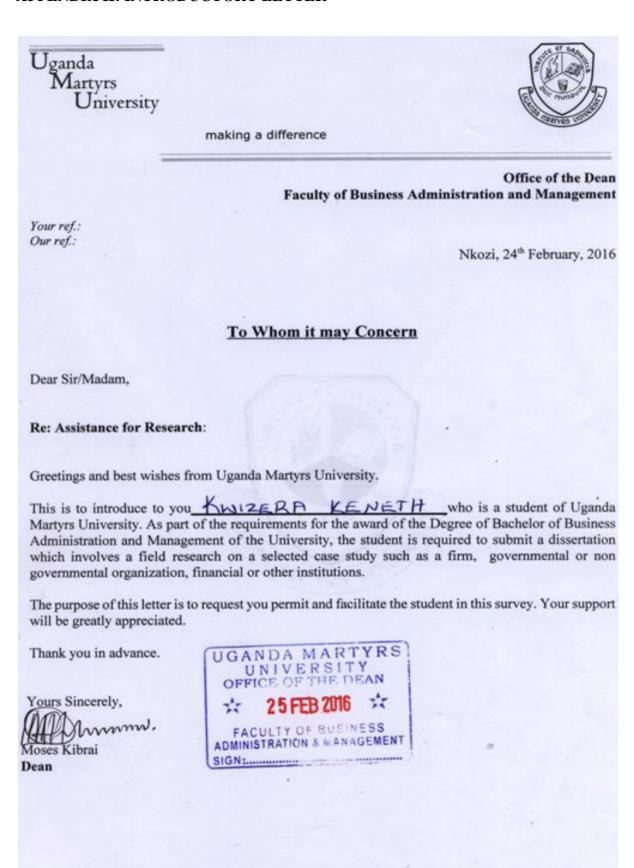
1= strongly disagree 2= Disagree 3= neither agree nor disagree 4= Agree 5= strongly agree

	1	2	3	4	5
Booking system					
Pioneer Easy Buses Limited has a booking system					
The booking system is efficient					
The booking system I s effective					
The booking system is convenient					
The booking system needs to be changed					
Time Management					
Pioneer Easy Buses Limited have a time table					
Pioneer Easy Buses Limited have fixed departure time					
Pioneer Easy Buses Limited have a fixed arrival time					
Pioneer Easy Buses Limited keep time					
Service quality					
Pioneer Easy Buses Limited seats of customers are					
spaced					
Pioneer Easy Buses Limited cleanliness is the best					
Pioneer Easy Buses Limited has comfortable seats in					
their buses					
Pioneer Easy Buses Limited stop in the designated					
places of customers					
Pioneer Easy Buses Limited have first aid kits the buses					
Pioneer Easy Buses Limited cares for its customers					

Pioneer Easy Buses Limited have safety measures for			
incase of an accident			
Customer satisfaction			
Pioneer Easy Buses Limited get the same customers			
Customers increase on a daily bases			
Customers invite others after use			
Pioneer Easy Buses Limited has affordable public			
transport			
Effectiveness			
Pioneer Easy Buses Limited recognize the needs of the			
poor			
Pioneer Easy Buses Limited recognizes the special needs			
groups			
Pioneer Easy Buses Limited increases mobility and			
accessibility			
Efficiency			
Pioneer Easy Buses Limited have affordable costs			
Pioneer Easy Buses Limited are safe			
Pioneer Easy Buses Limited are convenient to use			
Pioneer Easy Buses Limited are fast			
Pioneer Easy Buses Limited are reliable			

^{*}Thank you for your co-operation*

APPENDIX II: INTRODUCTORY LETTER



APPENDIX III: THE LETTER TO PIONEER EASY BUSES LIMITED

Uganda Martyrs University

P.O. Box 5498

Kampala.

24th February, 2014

Pioneer Easy Buses Limited

P.O. Box

Kampala, Uganda.

Dear transport Manager,

Re: Permission to carry out my research in your company

I do submit my request to your office for carrying out my research "Management of Pioneer Easy Buses Limited and performance of public transport in Kampala Capital City Authority". I am a Ugandan aged 25 years pursuing a Bachelors degree in Business Administration and Management, at Uganda Martyrs University.

This is to help in a dissertation that is to be submitted to the Faculty of Business Administration and Management in partial fulfillment of the requirement for the award of Bachelor's Degree in Business Administration and Management of Uganda Martyrs University.

This research will also help the company, passengers and other researchers.

Thank you in advance for your consideration in this regard.

Yours faithfully,

Kwizera Keneth

0706 388 131

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APPENDIX IV: KREJCIE AND MORGAN TABLES

Table for determining sample size from a given population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size. "S" is sample size.

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.

APPENDIX V: TABLES FROM SPSS

Gender of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	12	40.0	40.0	40.0
	Female	18	60.0	60.0	100.0
	Total	30	100.0	100.0	

Age of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-25	14	46.7	46.7	46.7
	26-35	11	36.7	36.7	83.3
	36-45	2	6.7	6.7	90.0
	46 and above	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

Education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	UCE	6	20.0	20.0	20.0
	UACE	4	13.3	13.3	33.3
	Tertiary	3	10.0	10.0	43.3
	University	17	56.7	56.7	100.0
	Total	30	100.0	100.0	

Duration of using Pioneer Easy Buses Limited

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Year	12	40.0	40.0	40.0
	2 years	17	56.7	56.7	96.7
	3 years	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Booking System

Descriptive Statistics

	N	Minimu m	Maximu m	Mean	Std. Deviation
Pioneer Easy Buses Limited has a booking system.	30	1.00	5.00	1.5667	.97143
The booking system is efficient.	29	1.00	4.00	1.7586	.91242
The booking system is effective.	29	1.00	4.00	1.6552	.76885
The booking system is convenient.	29	1.00	4.00	1.7241	.84077
The booking system needs to be changed.	29	1.00	5.00	4.2759	1.25062
Valid N (list-wise)	29				

Time Management

Descriptive Statistics

	N	Minimu m	Maximu m	Mean	Std. Deviation
Pioneer Easy Buses Limited have a time table	30	1.00	5.00	2.1000	1.12495
Pioneer Easy Buses Limited have a fixed departure time	30	1.00	4.00	2.4333	1.04000
Pioneer Easy Buses Limited have a fixed arrival time	30	1.00	4.00	2.3667	.96431
Pioneer Easy Buses Limited keep time	30	1.00	5.00	3.0667	1.01483
Valid N (list-wise)	30				

Service Quality

Descriptive Statistics

	N	Minimu m	Maximu m	Mean	Std. Deviation
Pioneer Easy Buses Limited seats of customers are spaced	30	1.00	5.00	3.2667	1.14269
Pioneer Easy Buses Limited cleanliness is the best	30	2.00	5.00	3.2667	.78492
Pioneer Easy Buses Limited have comfortable seats in their buses	29	1.00	44.00	4.7241	7.61060
Pioneer Easy Buses Limited stop in the designated places of customer	30	2.00	5.00	3.6667	.80230
Pioneer Easy Buses Limited have first aid kits in the buses	29	2.00	5.00	4.0000	.70711
Pioneer Easy Buses Limited care for its customers	30	1.00	5.00	3.0333	.88992
Pioneer Easy Buses Limited have safety measures for incase of an accident	30	2.00	5.00	3.1000	.95953
Valid N (list wise)	29				

Customer Satisfaction

Descriptive Statistics

	N	Minimu m	Maximu m	Mean	Std. Deviation
Pioneer Easy Buses Limited repeat customers	30	2.00	5.00	4.2000	.92476
Pioneer Easy Buses Limited customers increase on dairy bases	30	2.00	5.00	3.4000	.85501
Pioneer Easy Buses Limited invite others after use	30	1.00	5.00	3.3000	.95231
Pioneer Easy Buses Limited has affordable public transport	30	2.00	5.00	4.4667	.81931
Valid N (list wise)	30				

Correlation Analysis

Correlations Analysis of Booking system and performance of public transport in

Kampala Capital City Authority

		Booking	Performance of public
		system	transport
Booking system	Pearson Correlation	1	.386*
	Sig. (2-tailed)		.035
	N	30	30
Performance public	Pearson Correlation	.386*	1
transport	Sig. (2-tailed)	.035	
	N	30	30

^{*.} Correlation is significant at the 0.05 level (2-tailed). Source: Primary source, 2016

Correlations analysis of Time management and performance of public transport

		Time	performance
		management	public transport
Time management	Pearson Correlation	1	.318
	Sig. (2-tailed)		.087
	N	30	30
performance public	Pearson Correlation	.318	1
transport	Sig. (2-tailed)	.087	
	N	30	30

Source: Primary source, 2016

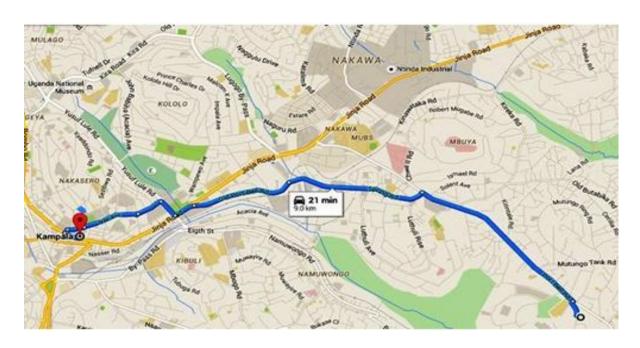
Correlations Service quality and performance of public transport

		Service	Performance public
		quality	transport
Service quality	Pearson Correlation	1	.384*
	Sig. (2-tailed)		.036
	N	30	30
Performance public	Pearson Correlation	.384*	1
transport	Sig. (2-tailed)	.036	
	N	30	30

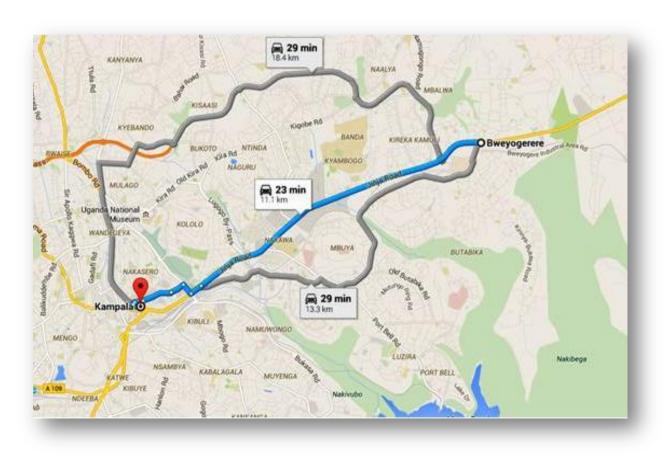
^{*.} Correlation is significant at the 0.05 level (2-tailed). Source: Primary source, 2016

APPENDIX VI: MAPS

BWEYOGERERE – KAMPALA



LUZIRA – KAMPALA



PIONEER EASY BUSES LIMITED



Pioneer Easy Buses Limited in the parking at Nambole and while customers are entering

