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EFFECTIVENESS OFMANAGING THE NORTH WEST MOTOR VEHICLES LICENCING REVENUESYSTEMS.

BY

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**A MINI- DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS OF MASTER OF BUSINESS ADMINISTRATION DEGREE AT
THE NORTH-WEST UNIVERSITY (MAFIKENG CAMPUS).**

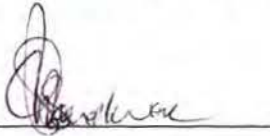
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DECLARATION

I, **Otsile Clutricia Senokwane**, hereby declare that this mini- dissertation entitled **"Effectiveness of managing the North West Motor Vehicles Licencing Revenue Systems"** submitted in partial fulfillment of the Master Degree in Business Administration is my own work and has not been submitted by me or any one for any degree at any university. It is my own work is design and execution. The material contained herein has been duly acknowledged.



Otsile Clutricia Senokwane

16 November 2012

Date

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ABSTRACT

The study intended to evaluate the effectiveness of managing the North West motor vehicles licensing revenue system in case of Department of Safety, Public Works in the North West Province with office in Mmabatho. Data was collected through telephone and e-mail questionnaire administered to the revenue section in the Department of Roads Safety and Public Works. A Sample size of 42 to which 44 copies of the questionnaire were dispatched returned all the questionnaires. The main findings revealed that the more knowledgeable the public the more they comply with policies. Tax incentives could be used to reduce health risk caused by car pollution.

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CHAPTER ONE

THE OVERVIEW OF THE STUDY

1.1 INTRODUCTION

In general, the amount of money owed to departments in South Africa have reached alarming proportions and also have far-reaching consequences, not only for the local authorities concerned, but also for the provincial and national spheres of government as well. Numerous reasons are advanced for this, but most of these reasons are unacceptable from a corporate governance and ethical point of view. Local authoritycouncillors are responsible, among others, to fulfil their stewardship function and to ensure that the annual financial statements of the authorities comply with existing relevant national and international accounting standards. In addition, the accounting disclosure of certain local authorities is often distorted and presents financial information that impedes sound financial management, or even makes it impossible (Lubbe and Rossouw, 2008).

The Department of Public Works and Safety has billionin outstanding money from motor vehicle arrears and penalties. These outstanding debts have accumulated due to the motor vehicle owners not complying with the regulation. The motor vehicle owners do not comply with regulated act: they give incorrect information and they cannot be tracked back to repay the outstanding debt on their account. The call centre was established to retrieve information of motor vehicles which could not found but this has proved unsuccessful.

1.2 BACKGROUND OF THE STUDY

Registration of motor vehicle is regulated an through approved system by the national department of transport called E-natis. It is compiled based on the National Road Traffic Act (NRTA) Act No 93 of 1996. E-natis- the national traffic information system (E-natis) is the official register for all vehicles, driving licenses, and contravention and accident data.

The Revenue and internal control sub-programme is functionally and administratively responsible for all motor vehicle registration and licensing services, and coordination of the E-natis implementation and management services and ensuring a sound system of internal control within the department.

The Act regulated that if the owner of the motor vehicle sells the vehicle, the two parties involved should complete all the necessary forms e.g.licensing forms and notification of change of ownership and the registration certificate. After the completion of forms, both parties have to register change of ownership, and failing to do so, arrears and penalties will accumulate and the previous owner will be liable for the outstanding amount. The Regulation 54 of Road Traffic Act 93 states that within seven days after the date upon which he or she had become aware of the theft, the owner should notify the registering authority of the demolished or permanent unfit vehicle (National Road Traffic Act (NRTA) Act No 93 of 1996).

If the police impound the vehicle, the owner should submit the receipt issued that the vehicle has been exported to other countries. The owner should notify the registering authority when submitting the notification which should be accompanied by South African policies. It is the owner's responsibility to make sure after the expiry date of the license that it is should renewed failing which ,after 21 days, the system starts to calculate the outstanding account on monthly basis. A motor vehicle should be registered within 21 days if it is acquired outside the republic and it must clear in terms of the customs and excise legislation. All the above-mentioned procedures lead the owners of the motor vehicle to be responsible for any arrears and penalties accumulated by each motor vehicle (National Road Traffic Act (NRTA) Act No.93 of 1996).

1.3 PROBLEM STATEMENT

The problem is to evaluate the effectiveness of the system used to collect outstanding money on motor vehicle arrears and penalties. It is assumed that the department has set targets to collect all outstanding money on motor vehicle arrears and penalties but the set targets are never met.

The challenge faced is that people, who owe the department money, could not be found because the information on the system is always invalid, yet the system keeps on calculating the interest on debts owed to the department. In 2004 to 2008, the department hired Mosiame Consultants and mandated them to track down people who owed the department money. The consultants faced a challenge, as they could not read the E-natis report. The consultants ended up failing because they could not find the people who owed money to the department because they lacked the knowledge of E-natis.

The problem is to identify what systems are required for the effective management of the North West Motor Vehicle Licensing Revenue? The researcher to come up with remedies to help with the problem areas:

- i. What policies are in place for debt collection regarding motor vehicle licensing?
- ii. To what extent is human resource capacity able to cope with debt collection?
- iii. What is the nature and scope of the operational systems for debt collection?
- iv. What are the challenges for effective management of motor vehicles revenue?
- v. What strategies could be developed for effective revenue management?

1.4 OBJECTIVES/AIMS OF THE STUDY

The main aim of the study is to determine the effectiveness of the management of the system of motor vehicle arrears and penalties revenue system in the Department of Public Works and Safety.

The study is directed by the following objectives:

- i. To investigate the system that is required for the evaluation of the collection of motor vehicle arrears and penalties.
- ii. To find out whether policies that govern debt collection are practised according to set policies.
- iii. To find out the extent to which human resources are capable of coping with debt collection.

- iv. To establish strategies that could be used to develop efficient and effective revenue management with reference to the collection of motor vehicle arrears and penalties.

1.5 RESEARCH DESIGN

The Department of Public Works and Safety is located in Mafikeng. This study focuses on revenue and internal control sub-programme that is functionally and administratively responsible for the motor vehicle registration and licensing service, coordination of the E-natis implementation and management services and ensuring a sound system of internal control within the department.

Qualitative research methods have been developed in the social sciences to enable researchers to study social and cultural phenomena. Examples of qualitative methods are action research, case study research and ethnography. Qualitative data sources include observation and participant observation (fieldwork), interviews and questionnaires, documents and texts, and the researcher's impressions and reactions (Myers, 2009). This Research is basic on a theoretical framework, and so the appropriate method used is the qualitative research approach.

Survey research involves acquiring information about one or more groups of people about their characteristics, opinions, attitudes, etc. The questionnaire was used in this research because it is the cheap and takes less time comparing it to face-to-face interview. In addition, the respondents can respond to questions asked with confidence that their responses would remain anonymous but truthful instead of facing face to face interview.

The population for this research is made up of the director, deputy director's, assistant directors, supervisors and cashiers of the systems in Mafikeng area of the North West Province. The population was chosen because of convenience considering the geographical location of the researcher.

1.6 LAYOUT OF THE STUDY

Chapter one illustrates the background of the problem and problem statement. It introduces the topic and provides an overview of what is discussed in the chapter. A chapter 2 provides the literature review of the study. Chapter 3 describes the research design and methodology. Chapter 4 includes analysis of the data guided by the research problems, sub problems and objectives. Chapter 5 gives a summary of the findings.

1.7 CONCLUSION

System management involves monitoring and controlling activities within the system, and taking corrective action to modify the actions of the system, by monitoring all the information in the revenue system and taking corrective action to collect all the money owed to the department. Corrective action also involves imposing debt collection policies on the people owing the department.

The added value is that this study evaluates and provides solution to the managers of the motor vehicle revenue system. The study, it will assist in developing new strategies that will work on the collection of motor vehicle arrears and penalties.

The study is based on the effectiveness of managing the North West Motor Vehicle Revenue Systems in Mafikeng. The study focuses on The revenue and internal control sub-programme which functions to administer the system responsible for the motor vehicle registration and licensing services, coordination of the E-Natis implementation and management services and ensuring a sound system of internal control within the department.

The next chapter, that is concentrates on literature review on the effectiveness of managing the North West Motor Vehicle Systems and opinions of other writers including their recommendations and conclusion on the subject matter.

CHAPTER 2

OVERVIEW OF THE LITERATURE

2.1 INTRODUCTION

Chen and Cheng (2010) note that it is necessary to balance a country's financial policy and promote a country's prosperities and to levy on tax equally. Although taxing power is that the country implements her rights to collect financial revenues, Tax regulations developed by a legislative body are so complicated that some practical tax problems, such as clearing the owed taxes (overdue payments), processing drawbacks of tax, ruling an appropriate tax rate, and realizing moving to administrative enforcement for delay cases, are derived. Under the amended law that is to implement the government policies of discouraging wasteful expenditures on luxury items and encouraging energy conservation, vehicle types have been classified into four categories: small passenger vehicles, large passenger vehicles, trucks and motorcycles.

Policy flexibility in the way of keeping the ability to exercise policy choices, efficiency and effectiveness (how well expected charging can be made, or the extent to which key policy goals can be realized) feasibility (including technical feasibility, implementation and transition issues), and equity and public acceptability all contribute to the ease of policy implementation (Barter, 2005).

2.2 DEFINITION

Revenue –Collection of data is accrued from the toll road, calculated in miles driven and the vehicle model, combined with valid calculated crash per mile driven. The revenue collection data on vehicle miles and collision were obtained from toll road authorities in Florida, Kansas, and New York (Braver, Solomon and Preusser, 2002).

Fiscal tools to restrain vehicle ownership are relatively little used. Purchase taxes and ownership taxes are widespread but tend to be revenue instruments rather than demand management tools (Barter, 2005).'

The more the valuable outcome in finance resources for local governments, the more the cars, the revenue tax increases, but these create problems because they end up with huge amount of data needed to be captured and analysed. The analysed data is used to administer tax debts and unpaid fines, and realize administrative enforcements that is moving to courts for delay cases, practice active measures, and speed up tax returning processes (Chen and Cheng, 2010).

In the meantime, advanced technology in vehicles and computers is raising awareness on specific direct economic incentive style to reduce vehicle emission costs effectively (Krupnick, Harrington and Alberini, 2001). As stated by Gallagher and Muehlegger (2011) accelerated domestic adoption of hybrid-vehicle technology plays policy debates. Hybrid vehicles consume less gasoline and emit less pollution per mile than traditional engines with similar performance. Beginning in 2000, federal, state, and local governments in the US experimented with the broadest of consumer incentives to stimulate hybrid vehicle adoption, including income tax credits and deductions, sales tax waivers, single-passenger access to carpool lanes, and waivers of emissions testing, registration and parking fees. Many incentives are generous, worth thousands of dollars and substantially reduce the incremental cost of purchasing a hybrid vehicle. Although strong interest exists at the federal, state, and local levels to encourage the adoption of hybrid vehicles, relatively little is known about how hybrid buyers respond to different types of government incentives.

2.3 POLLUTION AND REVENUE

Motor vehicles give increase to air pollution globally. They concentrate mostly in primary pollutants decreases rapidly with increasing distance from the source. Motor vehicles also contribute to global environmental problems, particularly to the greenhouse effect, but also ozone depletion. The relative contribution of automotive pollutants on ambient air quality tends to be more pronounced in urban than regional or global pollutant (Johnstone and Karousakis, 1999).

Pollution and urban gridlock can restrict economic growth through adverse effects on human health, productivity, and wasted time. Climate change is another problem that may hinder future development in vulnerable countries. Local pollution, traffic

congestion, and climate changes are all classic problems requiring corrective government action. Given the seriousness of these problems, it is critically important to address them with policy instruments that exploit, in a least-cost manner, all the behavioural responses for alleviating them (Parry, 2012).

The level to which transport demand has escalated in developing countries, especially in larger cities, brings faster improvements in road capacity; it also brings greater satisfaction in departments responsible for transport. Urban transport problems are too much and severe, these include accidents, traffic congestion which also impacts on the environment badly causing air, noise and water pollution. These problems occur in every city but at a different level (Seik, 1997).

Regardless of the extreme regulatory efforts to decrease vehicle emissions over the past 20 years, air pollution caused by cars and trucks continues to be a huge problem in urban areas of the US. Economists have given options on pollution fee programmes, and vehicles can be charged a fee based on their emission rate times their miles driven. They can target vehicles that create great impact in air pollution (Krupnick, Harrington and Alberini, 2001).

In the context of cars, pollution taxes could be used in a number of ways. They might be applied at the production stage as a means of pressurising car manufacturers to introduce production techniques that reduce pollution levels below those required by existing statutory regulations. They might also be used as a means of discouraging consumers from purchasing cars or fuels which are relatively more damaging to the environment than readily available alternatives, such as cars which are fitted with catalytic converters and those capable of performing on unleaded petrol (Walton, 1997).

Individuals have an understanding that a greater decrease in tax or coupon distribution meant less money available for public investments in transportation or pollution control. The survey weighting results by population across the counties does not match the sample respondents of 65 years old because they will oppose pollution fee plan, unable to research how the results of revenue recycling plan will vary. The precise way in which the revenues might be distributed and the precise form of the

recycling (e.g. through vehicle registration fees reductions alone, as opposed to some unspecified combination of such fees and 'sales tax reductions') might affect support and help in the design of a better revenue recycling system (Krupnick, Harrington and Alberini, 2001).

Until today, there has been only limited use of environmental taxes. Even though many countries increased significant revenue from taxes that could be partly rationalized on environmental grounds, these taxes typically have only limited effects on externalities. Most of the revenues reflected excise taxes on vehicle ownership and motor fuels.

Technological advances in the measurement of car emissions renew hope that a tax can be levied directly on these emissions. If this happens individuals would reduce pollution efficiently. For the moment, the emissions taxes or permits that work well for stationary sources such as electric generating plants are not considered feasible for mobile sources of pollution (Fullerton and West, 2002).

2.4 CALCULATION AND REVENUE

The incentive is a fee that is based on the vehicle's emission rate, assuming miles are not observable. Thus, motorists can reduce their fee by repairing their vehicle, but not by driving less. Sevigne 38 incorporates the choice of miles with a second-best emissions tax, but this tax requires knowledge of each vehicle's average emissions per mile and the accurate measurement of miles travelled (Fullerton and West, 2002).

The pollution fee paid is an independent variable, where the factors used to calculate the fees are a variable, i.e. the miles driven and whether the car is a pre-1980 model. Each of these factors influences support, e.g. the higher the fee paid, the lower the probability of support; or alternatively, more miles driven and driving a pre-1980 vehicle are both associated with a lower probability of support (Krupnick, Harrington and Alberini, 2001) .

The fee is based on the miles driven and the pollution per mile dirtier cars pay \$0.05/ mile, average cars pay \$0.015/ mile, and clean cars pay\$0.01/ mile; the vehicle's pollution per mile rating would be updated during the Smog Check (California's name

for their I /M program); the fees would be phased in over a 3-year period (Krupnick, Harrington and Alberini, 2001).

One can find that a shift from ownership towards usage taxes is not welfare improving; while a revenue-neutral shift makes the representative car user worse off, a utility-neutral shift leads to a significant loss of revenue to the government. An empirical analysis is based on Singapore data, where the government in recent years has taken initiatives to reduce the Certificate of Entitlement (COE) (Muthukrishnan, 2010).

One finds that state tax incentives are positively correlated with increased hybrid vehicle adoption .When we separately examine coefficients for income tax credit and sales tax waivers, we find that different types of incentives are associated with substantially different changes in hybrid vehicle sales .We estimate that a sales tax waiver of mean value is associated with over three times the effect of an income tax credit of mean value. Conditional on the value of the incentive value, we estimate that sales tax waiver shave more than a ten-fold greater impact on hybrid vehicle sales, evidence that consumers capture the majority of the tax incentive (Gallagher and Muehlegger, 2011)

A vehicle characteristics tax is levied based on the various attributes of a car, which are thought to be closely related to emissions. This can include vehicle weight, vintage, fuel type, horsepower, and the nature (or absence) of fuel injection, all of which can be important determinants of emissions. Taxes of this nature have been implemented in a number of European countries. Other examples of differentiated vehicle taxes include Austria, Iceland, and Norway, which have lower rates or provide tax exemptions for electric and/or gas-powered vehicles. Singapore taxes vehicles according to engine displacement. Vehicle characteristics taxes can also be used to target emissions more directly (Johnstone and Karousakis, 1999).

Revenues can be maintained by applying a uniform percentage tax to the purchase price of all vehicles. This avoids the problem of revenue loss as people choose more efficient vehicles in response to the fee base incentive, since they still pay the same excise tax rate. (Potential revenue losses from the fee base component are avoided,

because the pivot point declines over time as the average CO₂/km of the new vehicle fleet falls). But even here a good first step converting the existing road tax from a lump-sum fee into a per-km charge and coupling this with incentives for motorists to voluntarily switch to GPS based metering – would be straightforward to implement. Providing tax incentives for pay-as-you-drive auto insurance could reinforce these reforms, while helping to familiarize drivers with the concept of per mile charging (Parry, 2012).

2.5 LICENSE AND REVENUE

A driver's license is not something that could be transferred to the next party and it is offered as a service to an individual, we choose to treat it as a common good. This allows us capture the fact that many who buy a DL (Driver's license), receive various degrees of support from their family, we explored the facet of how access to a license to drive, which is a skill, can make differences in procuring employment. The dynamic relationship between increasing public transport supply and high-priced driver's license may end up excluding people without a driver's license in the job market. This provides a new way of framing the issue of transport and social exclusion (Priya and Uteng, 2009).

The driving population is probably best-tracked using published data on the number of licensed drivers. Furthermore, public regulation of drivers begins with licensing policy. In particular, license renewal requirements may directly influence driving licensure and traffic safety. Most states in the United States require some type of vision test, and some require a knowledge test or a road test at renewal. Some states require specific tests or reduce the renewal period for drivers above a particular age (Levy, 1995).

Regarding the direct information provision, The Service for the Registration of Vehicles only drew citizens' attention to the new deadline by marking the envelopes of the registration letters with a special stamp. The stamp mentioned the new date of commencement. This initiative could only reach the applicants for new license plates and had little added value. The introduction of the reflecting license plate for the front of a vehicle in Belgium is a prime example of a case in which little attention has been

paid to complete, factual, timely, and up-to-date information during the on-going policy process (Gelders, 2005).

The European regulation regarding the European license plate model intensified the discussion about the usefulness of the Royal and Ministerial Decree. Public Security departments became involved in controlling their use. The underlying issues are money (who gains the revenue from licensing the vehicles and their drivers), road safety, and air and noise pollution. These two policies provided detailed rules on product specification, vehicle registration, driver training, and driver licensing (Sperling et al., 2005)

License-plate recognition (LPR) technology has been widely applied in many different transportation applications such as enforcement, vehicle monitoring, and access control. These systems were developed with the main objective of interpreting the alphanumeric characters on vehicle plates without human intervention. They typically rely on four main components: an imaging acquisition processor, a license plate detection system, character segmentation and recognition engine and a computer to store the data. In other words, license-plate recognition(LPR) operation consists of capturing images of moving vehicles, locating license plates, segmenting and recognizing plate characters, and storing information(e.g. plate images, plate numbers, time of passage, location) in a database for online verification or posterior analyses (Oliveira-Neto et al., 2012)

Singapore has also been a pioneer with congestion pricing beginning with the Area Licensing Scheme (ALS) in the 1970s. This manual cordon-pricing scheme was replaced in the late 1990s by the Electronic Road Pricing (ERP) system, which is a form of congestion charging, with vehicles automatically charged time and location-specific point charges for passing a set of gantries ringing the city centre and a number of other locations (Barter, 2005)

Conventional Licensing systems were originally introduced as a form of driver control, serving the function of revenue generation, driver identification, and selection and education. The collection of revenue has come to be a less important function, with conventional driver's licenses being used more as a means to ensure that novices

meet certain minimal requirements deemed necessary to operate a motor vehicle safely in traffic. Conventional licensing systems that have a learner's permit usually have no mandatory time requirement for holding it, so beginners can choose to take the road test for a regular license very soon after receiving a learner's permit. In most conventional systems, to obtain a regular license, the novice must, after fulfilling the condition of the learner's permit pass a road test to demonstrate competency in meeting minimal vehicle operating standards. If successful, they are granted unrestricted driving privileges. The same 'treatments' are applied to all drivers and to those with only a few weeks of driving experience or those who have had many years of experience. Many jurisdictions have probationary licensing systems but few have been evaluated (Simpson, 2003).

Under the 1975 set of charges, a daily license had to be purchased for a vehicle to enter the restricted zone on weekdays i.e. from Mondays to Saturdays. No charges need to be paid for off-peak hours, Sundays and other public holidays (Seik, 1998). The revenues will be returned to the 'people of Southern California' through cutting vehicle 'registration and 3 license fees and some local sales taxes' (Krupnick, Harrington and Alberini, 2012).

The government introduced an innovative scheme to curtail vehicle usage called the Area Licensing Scheme (ALS) in June 1975. They did not join the car co-operatives. For non-car owners, more than half gave the main reason that public transport was highly accessible and adequate for their travel needs while others stated that it was because the scheme was too costly. The latter group could thus be enticed to become co-operative members if costs were made more adorable. Minor reasons for not joining the co-operative include ignorance of the scheme and non-ownership of a driving license (Seik, 2000).

The vehicle license tax is levied on a progressive basis according to the category of vehicles, the total cylinder displacement volume. Suspended for use, or is stolen, the owner of the vehicle should go through procedures required by the declaration of the vehicle being no longer serviceable, the suspension of service, or application for nullification, and then any tax overpayment can be refunded. The taxpayers are

owners or users of any form of transportation equipment that is subjected to licensing hereunder, and they are required by the tax authorities to pay the vehicle license tax for an appropriate tax rate (Chen and Cheng, 2010).

2.5.1 System Description

It seems that in order to avoid mismatching cases which occur in the other areas of an image like road surfaces and also other parts of a car, a first cropping stage is unavoidable to employ before extracting license plate recognition system features. Therefore, some preliminary experiments are done on the manually cropped car plates and it is concluded that cropping the car plates from the whole images can change the failure cases into a correct recognition. Consequently, an automatic method is proposed to crop the car plates automatically. The car plate area is detected by using the density of the vertical edges where it is higher in the plate area in comparison to the rest of the image (Zahedi and Salehi, 2011).

2.6 PUBLIC POLICY AND REVENUE

The Implementation of public policy can be defined as, what develops between the establishment of an apparent intention on behalf of government to do something, or to stop doing something, and the ultimate impact in the world of action. Even though there is no discussion about the fact that public information provision plays a role in implementing public policy, there is feedback about its act of function when policy intentions and policy decisions are put into practice. Two ways, in which policy can be viewed in process of implementation, are two points of view regarding the function of public information to stress the need for clarity and consistency in form and in content in order to increase the probability of compliance and execution of a specific policy. It can also be viewed as a point to stress its importance with regard to conflict resolution. It is considered important in forming trust, increasing cooperation, and increasing the right kind of involvement among actors in the implementation process (Gelders, 2005).

Today, drivers are using their co-operative car for activities such as personal and family social outings and shopping trips. A handful used the car for trips to work and during work. As found earlier, many respondents had cited the reason that public

An area-licensing scheme thus acts effectively as a type of admissions charge for entry into central congested areas at peak periods. Economists view area licensing as a form of traffic congestion tax. For transport planners it is a type of cordon pricing, which charges motorists who enter a cordoned off area (Seik, 1997).

The 'Cost Occasioned Approach' which is applied in road track cost allocation methods is the most commonly used method for determining taxes and charges to raise funds for road construction and maintenance. It is based on the principle that each user of the road pays for the costs they incur on it. Pavement costs (e.g. maintenance and reconstruction) are allocated to different vehicle classes based on their collective responsibility for different components of these costs using a variety of measures (e.g. vehicle-kms travelled, standard-axle-kms and PCU-kms) assumed to relate vehicle use to road costs and review the application of this method in a number of European countries. In the Swiss system, the distances travelled by each HGV on all public roads in the country are measured using the tachygraphy (Dodoo and Thorpe, 2005).

There are a number of different mechanisms through which congestion charging can be done, such as an area-wide scheme where motorists pay as they cross a cordon around the area, the imposition of tolls on specific roads or lanes, or distance based charges which are focused on whether or not such pricing could relieve congestion, and contribute to significantly increased ridership for public transport. Mobility is measured as a generalised cost of travel (time plus money) per kilometre; accessibility is measured as the generalized cost of travel per destination. Generally, mobility is closely related to the level of service provided on the transport system. Higher levels of service represent lower costs per kilometre of travel. Thus, increases in capacity of the system will usually lead to an increase in mobility, at least in the short term. Accessibility, however, is related to destinations, and therefore, requires attention both to land use patterns and to the quality of destinations (Stopher, 2004).

The principal approaches to reducing vehicle emissions have been ever more stringent in new car emission standards enforced against the manufacturer, increasingly stringent vehicle inspection and maintenance (I/M) programmes, and the

use of low emission fuels. New car emission reductions have been substantial and new fuel formulations have contributed to further significant reductions on a per mile basis. I/M programmes have also contributed to emission reductions of vehicles on the road, but not without controversy or concern over their efficacy and cost-effectiveness. Meanwhile on board computers and other advances in vehicle and computer Technologies are raising the possibility of using more direct economic incentive approaches to bring vehicle emissions down cost-effectively (Krupnick, Harrington and Alberini, 2001).

More agencies are also using or considering tolls to build new facilities. Recently, some states and the federal government have been exploring mileage-based fees as a replacement for fuel taxes, though the option is considered long-term and has little political support currently. Men and women reacted differently to a number, though not all, of the options surveyed. When there was a difference between the sexes, men were supportive of tax and fee increases and women were supportive of the tolling options. Women's higher support for specific road lanes may reflect a stronger preference among women to have trucks separated from personal vehicles in traffic. Women were less supportive than men of raising the vehicle registration fee to a flat \$62 per vehicle, but adding the option to vary registration fees by emissions and fuel economy increased support among women far more than men, such that support became about equal (Dill and Weinstein, 2007).

There are a number of other approaches that can be taken to manage congestion. Any strategy that succeeds in reducing congestion will also result in improvements to travel times, which are also likely to lead to increases in amounts of travel from other households and people. This is a point that needs to be more clearly understood by policy makers, transport, and urban planners. Space does not permit an extensive treatment of other approaches to managing congestion. However, among those that warrants mentioning here are a number of potential changes to working arrangements. Many of these have not yet proved attractive enough to employers to be embraced widely. However, because of their potential offer more changes that are dramatic to congestion levels in peak periods (Stopher, 2004).

These intermediate-length usage limits would make it unnecessary to have any system of rebates for motorists who scrap or export a vehicle early with unused tax-paid usage on their permit. Renewals would not be so frequent as to cause high transaction costs and constant kilometre, and the vehicle's puck value. Barter (2005) states that the details of this function and precisely how the impact factors are determined are matters for the detailed design of the road pricing system. On road pricing' limits, clearly, other alternatives are possible, but for argument's sake consider the following suggestions:

- The industrialised world has experienced substantial increases in private motor vehicle ownership over the past two decades, resulting in rapid increases in total travel on the road. In the United States, by the year 2000, car ownership had exceeded an average of one car per licensed driver in many urban areas.
- Although these costs are large and pervasive, they are not actually reflected in the transportation prices paid by the persons whose traveling decisions give rise to these social costs.
- Consequently, faced with rising transportation demand and growing negative impacts, the urban areas of high ownership costs have distorted usage patterns by encouraging car owners to drive frequently, since the car has already been paid for; among those who own cars, usage tends to be high (Muthukrishnan,2010).

The environment includes the use of taxes, subsidies, administrative charges and tradable quotas. Putting aside the use of administrative charges, where there is little evidence of any linkage between the magnitude of the charge and the level of any resultant pollution, the greatest interest seems to be in the extension of taxes on environmental bads (Walton, 1997).

License-plate recognition (LPR) systems have been employed in different transport applications since its launch into the commercial world in the 1980s Such applications involve enforcement, vehicle monitoring, and access controllicense-plate recognition can operate as a background system for electronic toll collection to identify violators, or used to enforce speed limit over a segment of a road. In access control, vehicle

plates are recognized and verified against a database to allow or deny access into a facility. In traffic monitoring, vehicles are detected at multiple points. Information such as travel time and route choice could be estimated subsequently for various planning and operational purposes (Moraes et al., 2012).

The interstate system is safer than other types of roads, so trucks should have a lower overall crash rate. Therefore, comparisons of large truck and passenger vehicle crash rates per unit of travel should serve as control for type of roadway. Mileage and crash data by vehicle type are routinely collected on ticket-controlled portions of many toll roads, where revenue tickets are issued to each vehicle upon entering. From these tickets, it is possible to determine where each vehicle entered the road, how many miles it travelled, where it exited, and whether it was a passenger or commercial motor vehicle. This makes it possible to compare passenger vehicle and commercial motor vehicle crash rates on a per mile basis with a high degree of accuracy (Braver et al., 2002).

The econometric analysis with flexible multinomial models reveals that potential car buyers in Germany currently have a low stated preference for electric, hydrogen, and hybrid vehicles. While this discussion focuses on the impact of common vehicle attributes such as purchase price or service station availability, it particularly considers the effect of socio-demographic and environmental awareness variables (Ziegler, 2012).

It suggests that many light-duty trucks impose dramatically far more costs on the larger community than their passenger car counterparts do. Ideally, policy should require that markets reflect external costs, so that vehicle users bear them directly (through, for example, parking fees and emissions- and distance-based taxes or purchase taxes), and pay the true price of their vehicle use decisions (Lemp and Kara, 2008).

2.8 PAYMENT METHODS FOR REVENUE

The taxation is divided into national tax and local tax in Taiwan. The local tax mainly includes vehicle license tax, land value tax, the mission-critical nature of the data, and the speed with which analyses need to be made now call for a more suitable

approach from an intelligent perspective to understand the payment classification of vehicle license tax in order to effectively discover potentially owed taxes in advance and continually promote the principle of taxation fairness and equality (Chen and Cheng, 2010).

Another outcome of legislative reluctance to raise fees and taxes that generate transportation revenues has been that legislators have put any potential revenue measure before the voters, as a ballot proposition. Analysts, in response, must seek to recommend options that not only have strong public support, but also are desirable in terms of their equity, ability to generate stable revenue streams, and capacity to encourage environmentally responsible choices by the travelling public. The transportation profession needs to develop a better understanding of how the public perceives a wide range of different revenue options. Knowledge on public opinions on transportation funding by including an unusually wide range of revenue options: the surveys looked at higher taxes (gas taxes, vehicle registration fees, vehicle license fees and state sales taxes), new tolled facilities (highway lanes, High-Occupancy/Toll lanes, fully-tolled highways, and truck-only lanes), and general obligation bonds (Dill and Weinstein, 2007).

This approach to Variance vehicle taxes could be implemented very quickly without causing unfairness to owners of vehicles for which high fixed taxes had been paid. Unlike the existing policy, existing ERP charges would not necessarily increase during the phase-in process because traffic would not necessarily increase. ERP rates might even drop slightly if traffic is initially reduced by the reform. The current policy would influence especially high-use categories such as taxis, as ERP pricing inevitably becomes more important and expensive under this approach (Barter, 2005).

The much greater flexibility of the ERP has made it possible to achieve fuller use of available road space, since such a system enables prices to be different for different short periods, and to make changes in prices very easily in response to traffic changes. The LTA is also already considering the design of a second generation ERP, which could permit distance based zone charging, and would enable usage

charges generally to be increased, and ownership charges reduced (Muthukrishnan, 2010).

The revenue potential of an urban bus line is usually higher than that of a rural one. Conversely, costs per vehicle kilometre are usually being lower in rural districts than in cities due to the higher average speed. Germany provides direct co-funding for elected long-term investments in major infrastructure projects. These are based on the Local Authority Traffic Financing Act. The states also use a portion of these funds for general public transport purposes. The local or regional authorities (the third tier), act as public transport authorities (PTAs) for bus services; provide subsidies for infrastructure investments under the GVFG through co-financing subsidies. Some local school authorities cover the remaining costs of pupil public transport tickets. Where necessary to ensure an adequate level of service from a PTA point of view, direct supplementary subsidies are paid to operators by the PTAs. Whether these payments are considered as “other operational revenues” or not, forms the fundamental basis for distinguishing between commercial and non-commercial services (Beck, 2012).

The absence of any attempt to use the system of vehicle excise duty payments to influence consumer behaviour through linking the level of the annual fee to such factors as the engine capacity or the fuel economy of the car was implicitly criticized by the Royal Commission on Environmental Pollution in its report on transport and the environment. The Commission recommended that this omission be rectified with the introduction of a steeply graduated sliding scale of payments related to the fuel efficiency of the car in new condition (Walton, 1997).

The vehicle classification systems used by the toll road authorities for revenue data collection differ. Some classify vehicles by body style, number of axles, weight, or number of tires. An extensive effort to include the same types of vehicles in the crash and travel categories for each state. Passenger vehicles consisted chiefly of cars, pickup trucks, and passenger vans. Commercial motor vehicles were mostly tractor-trailers and single-unit trucks.

However, in Florida and Kansas, toll authorities classified vehicles by their number of axles so this study had to define two-axle single-unit trucks as passenger vehicles for those two states. This may have led to underestimation of differences in crash involvement rates among passenger vehicles and commercial motor vehicles in Florida and Kansas (Braver, Mark Solomon and Preusser, 2002).

In 1995 California encouraged, through tax incentives, made a progressive shift towards Pay-As- You-Drive (PAYD) automobile insurance. Currently, auto insurance takes the form of a fixed payment, which is only weakly related to km driven. Under Pay-As- You-Drive, the insurance payment equals a fee per km, times annual km driven: if someone drives 20,000 km in a year rather than 10,000 km they would pay twice as much. Insurance companies could meter a vehicle owner's mileage through periodic odometer inspections, or ultimately GPS, with the per mile charges scaled by the driver's rating factor as determined by the insurance company based, for example, on age and prior crash record. Pay-As- You-Drive discourages driving, especially among those with highest crash risk, without a new burden on the average motorist—the increase in the per-km cost of driving is offset by the corresponding reduction in annual premiums. In fact, low-mileage drivers have an incentive to opt for Pay-As- You-Drive if offered alongside conventional plans to lower their total payments. However, most likely tax incentives are needed to kick-start the transition to Pay-As- You-Drive, not least given motorist unfamiliarity with km-based charging systems (Parry, 2012).

There are a number of objections to a fee system, not the least of which is that it is unfair to high mileage drivers and low-income people. These problems raise the general political viability of a pollution fee system, and some have suggested that revenues be recycled to citizens of the affected area, in such a way as not to interfere with the incentives to reduce polluting behaviour (Kruipnick, Harrington and Alberini, 2001).

2.9 REVENUE AND REDUCTION CONGESTION

In considering the fate of the collected revenues and testing alternatives, the process examines policies that return varying portions of the revenues to the public, either in

the form of tax reductions (through vehicle registration fees) or in the form of coupons to be used for vehicle emissions equipment repair, transit, and the like to be tested . It then says that the remaining revenues would be used to defray administrative costs and financing of public goods for transportation and emissions reductions. States around the USA are scrambling to find new sources of revenue to maintain and expand their transportation systems. Fuel taxes have long been the preferred revenue option because they are considered as user fee, but growth in population and vehicle miles travelled (VMT) is outpacing growth in gas tax revenues across the USA. The buying power of per-gallon fuel taxes has fallen due to inflation and improved fuel economy. These factors reduce the buying power of fuel tax revenues and in most cases state legislatures have recently been unwilling to raise fuel tax rates. Governments are looking for alternative sources of revenue (Kruipnick, Harrington and Alberini, 2001).

In the US, by 2000, car ownership had exceeded an average of one car per licensed driver in many urban areas. Similar patterns are evident in many other countries around the world. With this burgeoning of car ownership has come the obvious consequence of escalating road congestion. Most recently, London has introduced congestion charging for the central area, in an effort to reduce central London's congestion levels. Following on the heels of that, many other cities around the world are now seriously considering similar congestion charging schemes.

The dictionary defines congestion as an abnormal or excessive accumulation of traffic. Traffic Engineers define congestion as the phenomenon that arises when the input volume exceeds the output capacity of a facility. One implication of congestion is that it represents maximum or excessive use of a facility. Also, as the input volume increases, so the density of traffic increases density being defined as the number of vehicles per lane per kilometre. In general, congestion is specific to individual roadway segments, and is not a system wide phenomenon, although there are exceptions to this (e.g. in such cities as Bangkok and Mexico City). There are two types of congestion— recurring and non-recurring. The former is the type of congestion that occurs at the same place and the same time day after day, especially on weekdays. The latter is the type of congestion that arises from temporary

conditions, such as a vehicle breakdown, accident, or temporary road works (Stopher, 2004)

Singapore is famous for its strong transport demand management, which relies especially on disincentives for private motor vehicle ownership, including a vehicle quota system, and to a lesser extent usage charges, especially a simple congestion pricing system. Ownership restraint with a vehicle quota and fiscal policies to influence vehicle choice can even be integrated with congestion pricing. Fixed taxes are a blunt tool and unfair, at least in the sense that all motorists must pay them regardless of how much their particular usage patterns contribute to congestion or other impacts. High fixed taxes also undermine the usage restraints, since they seem insignificant compared with the large sunk costs. Congestion is not the only impact of traffic and large increases in total traffic levels and parking demand, as would be expected under existing policy, but it could threaten live ability throughout this densely settled urban environment and escalate energy demand (Barter, 2005).

The sense is that all motorists must pay them regardless of how much their particular usage patterns contribute to pollution, congestion and other negative impacts of motor vehicles. With the introduction of the ERP in 1998, the government has been slowly increasing usage charges, and gradually reducing taxes on ownership of cars, to achieve a better balance between ownership and usage costs. In the past, road taxes were substantial, but they have been reduced with the introduction of ERP (Muthukrishnan, 2010).

The most effective way to reduce nationwide traffic congestion, given the road infrastructure, is to use Global Positioning System (GPS) technology to charge every motorist per km driven on congested roads, according to prevailing congestion on the road. This tax system would exploit all of the possible behavioural responses for reducing congestion—encouraging people to commute earlier or later to avoid the peak of the rush hour, to car pool, to use public transport, to reduce their trip frequency, to relocate jobs out of busy downtown areas, etc. Although most people would continue to drive, despite these tolls, typically it only takes a moderate

reduction in the number of vehicles to significantly improve travel speeds on clogged roads (Parry, 2012).

A number of other states offer less valuable incentives. Three states reduce or eliminate registration or excise taxes and three states exempt hybrid vehicles from emissions testing. Four states have government purchasing requirements. At the local level, a number of cities (e.g. San Jose, Baltimore, Albuquerque, and New Haven) reduce or waive public parking fees for hybrid-electric vehicles. Finally, corporations have begun to provide generous private incentives for employee hybrid vehicle purchases. Beginning in 2004, Timberland offered a \$3000 rebate towards hybrid purchases. Google began to offer a \$5000 rebate for hybrid vehicle purchases in March 2005, and Bank of America began to offer a \$3000 rebate for hybrid vehicle purchases in June 2006 (Gallagher and Muehlegger, 2011).

The principal approaches to reducing vehicle emissions have been ever more stringent with new car emission standards enforced against the manufacturer, increasingly stringent vehicle inspection and maintenance (I /M) programmes, and use of low emission fuels. New car emission reductions have been substantial and new fuel formulations have contributed to further significant reductions on a per mile basis. I /M programmes have also contributed to emission reductions of vehicles on the road, but not without controversy or concern over their efficacy and cost-effectiveness. It then says that the remaining revenues would be used to defray administrative costs and financing of public goods for transportation and emissions reductions. The implication of these phrases is that the revenues will not be returned to drivers in proportion to their pay-in. The computer-assisted programmes assigns tax reductions but that the tax reduction will be Y dollars per year, so they would actually pay Z dollars per year on net (Kruipnick, Harrington and Alberini, 2001).

The primary objective of the VQS was to better control the growth in the vehicle population and reduce the volatility in its annual growth rate. The means, to do so was to directly control the number of new vehicle licenses issued each year. Each auction had yielded average revenue of US\$72.6 million. Each quota license issued

over the past 12 years had cost an average of US\$12,850. With the introduction of the VQS, the ARF was progressively lowered from 175% as of May 1990. The ARF currently stands at 130% with more volatile growth patterns before the VQS was introduced.

Specifically, from 1975 to 1989, the annual rate of growth of the vehicle population averaged 4.4%, with annual fluctuations ranging with a standard deviation of 4.3%. While the VQS had succeeded in lowering the average annual rate of growth of car population and its volatility, it does not eliminate the fluctuations. This is because the VQS does not fix the rate of growth of new vehicle registrations. Each year, vehicle quota incorporates a forecast of the number of de-registrations during that year, and therefore the target vehicle population may be missed if the forecast number of de-registrations is not reached or exceeded (Kohl, 2003).

2.10 POLICIES

The pollution fee plan is a substitute for an inspection and maintenance programme, such as Southern California's Smog Check programme because a new version of this programme (Smog Check II) was not yet implemented in Southern California at the time of the survey. One could not test the effect on voting in the survey of specifying this change in policy (Kruipnick, Harrington and Alberini, 2001).

Policy makers have become increasingly focused on the idea of reducing congestion. The mechanisms for reducing congestion are several. Included among these are increasing ride sharing (a mainstay of Transportation Demand Management policies in the US, for example), increasing the use of public transport, providing high occupancy vehicle lanes on various roadways, etc. Initially, Singapore, and then several cities in Norway experimented with introducing congestion charges for central cities. It seems that the use of the private car, congestion and declining shares of the market for public transport are all labelled as negatives that should be set right by some type of policy intervention. The U.K. road system currently grinds towards gridlock (Stopher, 2004).

The economic incentive policies to internalise the external costs of pollution from private vehicles, particularly since technology-based direct forms of regulation, seem

to be an increasingly costly means of ensuring ambient air quality objectives. Given the impossibility of implementing an ideal pigovian tax based directly on damages, the prohibitive costs involved in implementing its closest approximation an undifferentiated emissions tax, a variety of 'second best' policies such as aggregated and differentiated fuel taxes, fees on vehicle miles travelled, scrap age bounties, road congestion pricing and vehicle sales taxes and annual (Johnstone and Karousakis, 1999).

Seik (1998) argues that Singapore's land transport policy merges into one of reducing traffic congestion. The alleviation of traffic congestion was seen as invaluable in helping make Singapore an attractive destination for foreign investment, trade and tourism. The main land transport strategies, which were formulated, based on this policy, and which have remained until today, are:

- (a) Integrated and coordinated land use and transportation planning to minimise travel demand and maximise use of road space
- (b) Expanding the road network, maximising its capacity and providing accessibility to all parts of the city;
- (c) Improving the efficiency of the public transport system and integrating rail, bus and taxi services;
- (d) Effective travel demand management by managing vehicle ownership and usage;
- (e) Improving traffic management measures.

The Land Transport Authority (LTA), an amalgamation of most of these agencies, now handles the management and administration of the transport sector in Singapore, which, prior to 1995, was fragmented and handled by several transport-related agencies.

In the late 1960s, Singapore's early policy on vehicle ownership was one of restraining vehicle ownership via taxes. A series of taxes are added to the vehicles' open market value (OMV) which is essentially the manufacturer's price together with insurance and freight costs. The types of upfront vehicle taxes and the rates as first imposed in 1968 (in parentheses) were import duty (30% of the OMV); registration fee

(S\$15); and additional registration fee (ARF) (15% of the OMV). Vehicle owners also have to pay an annual road tax, which increases with the car's engine capacity. In 1968 this was a flat S\$0.10 cc21 engine capacity (Seik, 1998).

Fiscal instruments are usually the most effective policy in this regard, while also providing a valuable source of government funds. Cap-and-trade systems are another promising instrument, but (in general) only if they are designed to mimic (ideal) tax policies (Parry, 2012). Singapore's land transport policy highlighted the danger of uncontrolled private car ownership and usage in the context of Singapore's limited land resources. The alleviation of traffic congestion has since then remained a key objective in helping make Singapore an attractive destination for foreign investment, trade and tourism (Seik, 1998).

In China, Beijing and Shanghai are the first two cities to implement policies on vehicle ownership and use. The two cities are similar in many aspects such as developed economy, high population density, huge metro system being built, etc. However, due to different priorities of the policies implemented, vehicle ownership and use in the two cities are quite different. Since the beginning of this century, China has been promoting the growth of domestic vehicle market. At the beginning of 2009, the China state council announced the 'auto industry revitalisation planning which includes a series of measures promoting the growth of vehicle market and the primary goals of implementing policies on vehicle ownership and use in Beijing and Shanghai is to limit the excessive growth of vehicle fuel consumption (Hao et al., 2011).

Thus, if purchase taxes were introduced, large shifts in the types (and number) of vehicles people purchase (from vehicles with high external costs to those with low costs) would likely result, and older vehicles would probably be retained longer. Revenues from such policies could be used to encourage provision and design of lower- cost substitutes (including hybrids, bicycles, walk paths, and safer vehicle bodies). In markets that internalise such costs, motorists may be expected to drive significantly less, purchase different vehicles, and, along with their communities, be much better off (Lemp and Kockelman, 2008).

2.11 ADVANTAGES AND DISADVANTAGES OF REVENUE

The fact that under the usage limit approach, each vehicle has its own unique price per unit of usage may seem confusing but could provide important advantages. For example, it means that these models for road pricing or distance-based charging could easily include differentiation, such as emission characteristics or a luxury tax component for equity purposes. Furthermore, such taxes are still paid as a lump sum at the time of purchase or at renewal of the permit, and able to exert an influence on purchase decisions (Barter, 2005).

Traffic safety is the number and type of individuals making up the population of drivers. Drivers of different ages tend to have different driving characteristics. For example, younger drivers tend to be inexperienced and take while older drivers face declining driving skills and abilities. Other driver characteristics, such as the percentage of vehicles that are trucks and the urban/rural mix, are also known to affect traffic safety (Levy, 1995).

Grounds for such claims are not difficult to find. Utility related to maintaining gender roles and family structure does not have to mean anything beyond that the parents raise their children according to their own values and though women being overall more productive in household work may not be a politically correct statement, but this in itself does not make it untrue. It seems quite plausible that women have a biological advantage in raising children, and just as plausible that girls contribute more in the household work than boys do, where this training alone is enough to create a comparative advantage later in life (Priya and Uteng, 2009).

The more vehicles a family have, the less likely that a consumer in this family is willing to purchase an EV. In the relevant studies in other nations, the coefficient of government policies is generally positive. The possible explanations for the negative coefficient of government policies are: the current promotion policies are still somehow limited (mainly on sub-sides), the consumers are still unaware of these promotion policies, and the consumers are clear about the disadvantages of domestic electric vehicles. Since the coefficient of government policies is -0.395 , it is obvious

that its absolute value is small. Thus, one can figure out that government policies make a little difference to consumers' purchasing willingness (Zhang et al., 2011).

The US HELP programme measures static axle weights at strategic points around the network, but this is only used for enforcing axle load limits. If these weights were used to estimate charges, this could have the distinct advantage of capturing some of the variation in actual axle weights that occur as loads are delivered and collected at different locations. However, the principal disadvantages of this include the cost of installing and maintaining the roadside equipment necessary for static load measurement and the considerable errors in estimating damage estimates from static load measurements (Dodoo and Thorpe, 2005).

Contemporary license-plate recognition systems, and object recognition systems in general, do not usually take advantage of the new sensor capabilities because higher image resolutions increase computational costs. The negative impact is that the rebound effect of vehicle ownership increase partly offsets policy's effects on reduction of total vehicle use. Shanghai focuses on the limitation of vehicle ownership by controlling the total number of private vehicles (Hoa et al., 2011).

Forecasting the demand for new products or transportation innovations requires information about consumers' preferences for products or services that do not exist in the current market- place. Stated preference (SP) experiments can be designed to measure consumers' preferences for hypothetical alternatives, including new products. Customers' preferences for AFVs can be inferred by stated preference techniques. Compared with the conventional revealed preference method, there are several advantages of the SP method. The SP method can be used to obtain several (hypothetical) choice observations from each respondent. As the SP survey also has advantage over the revealed preference survey in that one can design the experiments in the SP survey with independent, widely varying conditions, and explanatory variables across respondents as well as across experiments for each individual. As a result, the SP method has been widely applied to analyse consumers' preferences for AFVs (Sperling et al., 2005).

2.12 SKILLS AND TRAINING

The Korean Government changed the system to take a more steady approach during the Fourth Development Plan period (1977–1981). It required only large enterprises in selected industrial and service sectors to undertake training of their workers (Lee, 2006).

There are strong grounds for seeing the broad definition as the more valid as many potential workers are likely to be discouraged in the context of mass unemployment, particularly where the costs of job searching are significant, as is the case for many rural unemployed. Whatever the definition chosen, the level of unemployment in South Africa is very serious (McGrath and Akoojee, 2007).

The learnership was then offered based on these qualifications through the Department of Labour, SETAs, and South African Qualifications Authority. The Joint Initiative on Priority Skills Acquisition (JIPSA) arose from the adoption of ASGI (Accelerated and Shared Growth Initiative). Its task is to elevate the short supply of skills as a national agenda issue. JIPSA's main priorities are engineers, artisans and technical skills (Allais, 2012).

2.13 RESEARCH QUESTIONS

The literature review shows that they are indirect and direct links between the revenue systems and policies. However it is still not clear the extent to which policy affects the revenue systems. The following questions remain:

1. To what extent do the policies affect the revenue systems?
2. How long does it take to track outstanding money in the system?
3. If a government come up with the new strategies and revenue system will the public and the staff accept the changes positively?

2.14 CONCLUSION

It will not be shocking that those free market dispositions support a system of tradable pollution permits. But, without sticking to their, the moral doubts which many might have about a system which turns the environment into a marketable commodity that

can be bought and sold, a system of tradable permits might also be attractive to environmental organisations which would be allowed to purchase permits and effectively withdraw them from circulation, hence reducing the total amount of pollution permitted. Irrespective of whatever the limited evidence to date indicates about the success, or otherwise, of the use of tradable pollution permits the UK Government. Until now, the application of the use of tradable permits has only been applied to fixed sources of pollution, since it is generally more difficult to measure pollution emissions from mobile points. An example of such a difficulty is provided by the recently introduced Regulations giving powers to the police to fine motorists in charge of vehicles that are not compliant with EU emission limits. The limitation of these regulations depends upon the resources available to the police, and more importantly their vigilance in detecting something, which is often not readily apparent (Walton, 1997).

As a result, there is now heavy competition in the construction of charging stations and related technologies. At present, every enterprise uses its own technical standards to build the charging stations, but decisions regarding the establishment of national standards are awaited and it is obvious that this is an important strategic decision that will influence the relative positions of all the competitors in the industrial sector (Liu and Kokko, 2012).

For this reason, taxes can appear to be a rather clumsy price incentive that will frequently respond more slowly than changes in the relative cost structures of different firms. As an alternative, advocates of tradable permits consider that they offer a means of reducing environmental pollution that is more market responsive than a system of environmental taxes, and one that is therefore likely to be more effective. At the moment Motor vehicle owners are already required to purchase a permit through the annual payment of a license fee for road tax, before they are allowed onto the public highway (Braver et al., 2002).

This has to be renewed every twelve months, during which time the Government normally increases the charge in the annual budget. Yet, in contrast to the system of tradable permits, the number of road vehicle tax discs available is, at present, infinite

and their cost is fixed. Moreover, the annual payment of around and 150 for a private car is unlikely to be viewed by many as a serious impediment to the ownership of a car when viewed in the context of overall running costs, and is considerably less in real terms than was paid by motorists for a road license (Braver et al., 2002).

The value added is that, with a strong understanding on how policies and revenue works the public will be able to comply with the policies. Tax incentives can be used to help reduce pressure on landfills and reduce risks posed by hazardous wastes. One option is pay-by the-bag schemes, which encourage households to generate less waste (Parry, 2012).

The next chapter discusses the research methodologies, applied to find out to what extent effective management revenue system impacts on policies. There are two-research methodologies the qualitative and quantitative methods. In selecting the methodology suitable for this research, the advantages and disadvantage concerning the two research methods, are taken into consideration.

CHAPTER 3

RESEACH METHODOLOGY

3.1 INTRODUCTION

In Chapter 3, the three research questions which could not be answered from the literature review are identified. Research designs are plans that guide the arrangement of conditions for the collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. A research design therefore provides a chronological plan that specifies the way that the research is executed in order to address the research questions(Niekerk, 2009).

The following questions are raised: (1) To what extent can the policies affect the revenue systems? (2) How long does it take to track outstanding money in the systems? (3) If the government is able to come up with new strategies and revenue systems will the public and staff accept the changes positively?

The main aim of the study is to find out how effectively the motor vehicle arrears and penalties revenue system is managed. To establish validity of the aims the study, it is important to use the correct methodology in collecting and analysing. The chapter describes the research design and explains the sampling methods and data collection procedures used. The researcher complied with research ethical considerations.

3.2 RESEARCH TYPE

3.2.1. Qualitative and Quantitative Research

Quantitative research consists of studies in which the data can be analysed in terms of numbers. Qualitative research describe events, persons and so forth scientifically without the use of numerical data. Quantitative research is based more directly on its original plans and its results are more readily analysed and interpreted. Qualitative research is more open and responsive to its subject. Both types of research are valid and useful (Hughes, 1998).

Qualitative Research is collecting, analysing, and interpreting data by observing what people do and say. Whereas, quantitative research refers to counts and measures of

things, qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols, and descriptions of things. Quantitative research is objective; qualitative is subjective. Quantitative research seeks explanatory laws; qualitative research aims at in-depth description.

Qualitative research measures what it assumes to be a static reality in hopes of developing universal laws. Qualitative research is an exploration of what is assumed a dynamic reality. It does not claim that what is discovered in the process is universal, and thus, replicable. Common differences are usually cited between these types of research include (Anderson, 2006).

Qualitative research is exploratory, and it is used when one does not know what to expect, to define the problem or develop an approach to the problem. It is also used to go deeper into issues of interest and explore nuances related to the problem at hand. Common data collection methods used in qualitative research includes focus groups, triads, dyads, in-depth interviews, uninterrupted observation, bulletin boards, and ethnographic participation/observation.

Quantitative research is conclusive in its purpose as it tries to quantify the problem and understand how prevalent it is by looking for projectable results to a larger population. One collects data through surveys (online, phone, paper), audits, points of purchase (purchase transactions), and click-streams (Mora, 2010).

3.2.1.1 Quantitative research –key characteristics

3.2.1.1.1 Control

This is the most important element because it enables the scientist to identify the causes of his or her observations. Experiments are conducted in an attempt to answer certain questions. They represent attempts to identify why something happens, what causes some events, or under what conditions an event does occur.

3.2.1.1.2 Operational Definition

This means that the steps must define the terms or operations used to measure them. An operational definition forces one to identify the empirical referents, or terms. In this manner, ambiguity is minimised.

3.2.1.1.3 Replication

The data obtained in an experiment must be reliable, that is, the same result must be obtained if the study is repeated. If observations are not repeatable, our descriptions and explanations are thought to be unreliable.

3.2.1.1.4 Hypothesis Testing

This means that the systematic creation of a hypothesis and subjecting it to an empirical test (Mora, 2010).

3.2.1.2 Qualitative Research Key Characteristics

Events can be understood adequately only if they are seen in context. Nothing is predefined or taken for granted. Qualitative researchers want those who are studied to speak for themselves, to provide their perspectives in words and other actions. Qualitative research is an interactive process in which the persons studied teach the researcher about their lives. Qualitative researchers attend to the experience as a whole, not as separate variables. The aim of qualitative research is to understand experience, as unified. Qualitative methods are appropriate to the above statements (Mora, 2010).

3.2.1.3 The Similarities

Whilst quantitative research may be mostly used for testing theory, it can also be used for exploring an area and generating hypotheses and theory. Similarly, qualitative research can be used for testing hypotheses and theories even though it is mostly used for theory generation. Qualitative data often includes quantification (e.g. statements such as more than, less than, most as well as specific numbers). Quantitative (a questionnaire) approaches can collect qualitative data through open-ended questions. The underlying philosophical positions are not necessarily as distinct as the stereotypes suggest (Mora, 2010).

Criteria	Qualitative Research	Quantitative Research
Purpose	To understand & interpret social interactions.	To test hypotheses, look at cause & effect, & make predictions.
Group Studied	Smaller & not randomly selected.	Larger & randomly selected.
Variables	Study of the whole, not variables.	Specific variables studied
Type of Data Collected	Words, images, or objects.	Numbers and statistics.
Form of Data Collected	Qualitative data such as open-ended responses, interviews, participant observations, field notes, & reflections.	Quantitative data based on precise measurements using structured & validated data-collection instruments.
Type of Data Analysis	Identify patterns, features, themes.	Identify statistical relationships.
Objectivity and Subjectivity	Subjectivity is expected.	Objectivity is critical.
Role of Researcher	Researcher & their biases may be known to participants in the study, & participant characteristics may be known to the researcher.	Researcher & their biases are not known to participants in the study, & participant characteristics are deliberately hidden from the researcher (double blind studies).
Results	Particular or specialized findings that is less generalisable.	Generalizable findings that can be applied to other populations.
Scientific Method	Exploratory or bottom-up: the researcher generates a new hypothesis and theory from the data collected.	Confirmatory or top-down: the researcher tests the hypothesis and theory with the data.
View of Human Behaviour	Dynamic, situational, social, & personal.	Regular & predictable.
Most Common Research Objectives	Explore, discover, & construct.	Describe, explain, & predict.
Focus	Wide-angle lens; examines the breadth & depth of phenomena.	Narrow-angle lens; tests a specific hypothesis.
Nature of Observation	Study behaviour in a natural environment.	Study behaviour under controlled conditions; isolate causal effects.
Nature of Reality	Multiple realities; subjective.	Single reality; objective.
Final Report	Narrative report with contextual description & direct quotations from research participants.	Statistical report with correlations, comparisons of means, & statistical significance of findings.

Table 3.1: Explain the difference between Qualitative and Quantitative Research, Magoli (2004).

3.2.3 The Required Data

3.2.3.1 Primary and Secondary Data

Primary data related to pieces of information collected by the research, whereas secondary data originate elsewhere. Generally, the researcher is expected to collect primary data when using quantitative methods, but that secondary data are more acceptable when using a qualitative method. This is because there are certain common aspects of qualitative research, which involve only secondary data, such as the study of television or newspaper discourses. If one wants to understand the nature of the representation of too many people on television, one way not make his/her own television programmes! One needs to use those, which exist, and they would form the secondary data (Forshaw, 2000).

A secondary data research project involves the gathering and/or use of existing data for purposes other than those for which they were originally collected. These secondary data may be obtained from many sources, including literature, industry surveys, compilations from computerised databases and information systems, and computerized or mathematical models of environmental processes (Forshaw, 2000).

3.3 DATA COLLECTION METHOD

3.3.1 Methods for Collecting Primary Data

3.3.1.1 Questionnaires

A questionnaire is a document prepared by the investigator containing a set of questions. These questions relate to the problem of enquiry directly or indirectly. The questionnaire method is very economical in terms of time, energy and money. The method is widely used when the scope of enquiry is large. Data collected by this method are not affected by the personal bias of the investigator (ANAND, 2011).

Questionnaires usually form an integral part of descriptive and opinion-related surveys. Questionnaires can either be in the form of a self-administered questionnaire that is where the respondent is requested to complete the questionnaire in his/her own time or in the form of a structured interview, where the interviewer the researcher

writes down the answers of the respondent during a telephone or face-to-face interview (Trochim, 2006).

A second type is the group-administered questionnaire. A sample of respondents is brought together and asked to respond to a structured sequence of questions. Traditionally, questionnaires were administered in-group settings for convenience. The researcher could give the questionnaire to those who were present and be sure that there would be a high response rate. If the respondents were unclear about the meaning of a question, they could ask for clarification (Trochim, 2006).

A less familiar type of questionnaire is the household drop-off survey. In this approach, a researcher goes to the respondent's home or business and hands the respondent the instrument. In some cases, the respondent is asked to mail it back or the interviewer returns to pick it up. This approach attempts to blend the advantages of the mail survey and the group-administered questionnaire (Trochim, 2006).

Mail questionnaires are typically more cost effective than personal interviews. In the mail questionnaire, respondents can take more time to collect facts, talk with others, or consider reply. Its drawback is non-response and less return (Zafal, 2012).

3.3.1.1.1 Advantages of the Questionnaires

1. It is economical and requires less skill.
2. A questionnaire can be administered to large number of individuals simultaneously.
3. Uniformity of questions
4. Due to anonymity, the respondents feel greater confidence because they give opinions without fear that the answer will be connected to their names.
5. The questionnaire places less pressure on the respondents for immediate responses.

3.3.2 Sampling method

Qualitative research uses the purposive sampling method. Purposive sampling involves selection of informants based on an important characteristic under study,

such as where they live (rural or urban), position in society (for example, community leader or ordinary householder), or specific cultural knowledge (for example, caretakers of children, farmers, traditional healers). Informants are selected with the assistance of local leaders and other local persons (Sul, 2001).

3.3.2.1 Sample strategies

There are three broad approaches to selecting a sample for a qualitative study (Marshall, 1996).

3.3.2.2 Convenience Sample

This is the least rigorous technique, involving the selection of the most accessible subjects. It is the least costly to the researcher, in terms of time, effort and money, but may result in poor quality data and lacks intellectual credibility. There is an element of convenience sampling in many qualitative studies, but a more thoughtful approach to selection of a sample is usually justified.

3.3.2.3 Judgement Sample

The researcher actively selects the most productive sample to answer the research question. This can involve developing a framework of the variables that might influence an individual's contribution and may be based on the researcher's practical knowledge of the research area, the available literature and evidence from the study itself. This is a more intellectual strategy than the simple demographic stratification of epidemiological studies, though age, gender and social class might be important variables.

3.3.2.4 Theoretical Sample

The iterative process of qualitative study design means that samples are usually theory driven to a greater or lesser extent. Theoretical sampling necessitates building interpretative theories from the emerging data and selecting a new sample to examine and elaborate on this theory. It is the principal strategy for the grounded theoretical approach but is used in some form in most qualitative investigations necessitating Interpretation.

Qualitative research design can be thought of as a rough sketch to be led in by the researcher as the study proceeds. After a preliminary question has been formulated and resources identified and secured, the design can be likened to an abstract drawing. It often takes shape without particular individuals, groups, organisations, or sites that is the social and physical settings where subjects or cases are located in mind. Further specification of the research design requires the researcher to understand and consider the unique characteristics of septic research subjects and the settings in which they are located. In essence, the researcher must make the design more concrete by developing a sampling frame that is the criteria for selecting sites and/or subjects that are capable of answering the research question(s), identifying specifies sites and/or subjects and securing their participation in the study.

Purposive sampling strategies differ from probability (or random) sampling strategies. Researchers must be able to explain the use of purposive sampling in any particular study and discuss the implications for the research results. Poor description often leads to criticisms of qualitative research based on inadequate sampling designs (Diver and Frank, 2000). (S) presents the sample size and (N) presents the population size. The population of the study consists (N) of 44 employees who work in the revenue section and the sample size (S) is 42. This means that about 42 questionnaires were completed to validate the study.

3.4 ETHICAL CONSIDERATION

People think of ethics which, they defined as rules for distinguishing between right and wrong, such as the Golden Rule, a code of professional conduct like the Hippocratic Oath, a religious creed like the Ten Commandments, or a wise aphorism like the sayings of Confucius. This is the most common way of defining "ethics": norms for conduct that distinguish between acceptable and unacceptable behaviour. Ethical norms also serve the aims or goals of research and apply to people who conduct scientific research or other scholarly or creative activities. There is even a specialized discipline, research ethics, which studies these norms. There are several reasons why it is important to adhere to ethical norms in research. Norms promote

the aims of research, such as knowledge, truth, and the avoidance of error. Research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, ethical standards promote the values that are essential to collaborative work, such as trust, accountability, mutual respect, and fairness. The ethical norms help to ensure that researchers can be held accountable to the public.

Ethical norms in research also help to build public support for research. The norms of research promote a variety of other important moral and social values, such as social responsibility, human rights, animal welfare, compliance with the law, and health and safety (Resnik, 1998). Ethical principles applied to larger groups of people or population are designed to protect human dignity, integrity, self-determination, confidentiality, rights, and health of populations and the people comprising them. Ethical principles also establish positive moral responsibilities of persons and authorities which, sponsor, conduct, or oversee research on population (Gostin, 2007). The main ethical debates in qualitative research revolve around the tensions between covert and overt research, and between the public's right to know and the subject's right to privacy. Clearly, some practices that might be extremely unobtrusive, such as observing through a one-way mirror, concealed tape-recording or telephone tapping are just not permissible - and might lead to criminal proceedings (Woods, 2006).

3.5 Limitations

Limitations are factors that may influence your research outcomes if you do not control or limit them from the beginning of your research. Factors such as the size and type of your samples, the time limit in successfully completing your research, the amount of budget allocated for the study, the background of the respondents, the honesty of all responses and so forth, can all effect of your findings. By defining your limitations, Conclusion and recommendations from your findings can be generalized to other populations that share similar characteristics (Ismail, 2004).

The limitations of the study are those characteristics of design or methodology that set parameters on the application or interpretation of the results of the study; that is, the constraints on generalizability and utility of findings that are the result of the devices of design or method that establish internal and external validity (Cline, 1986).

Limitations are conditions that restrict the scope of the study or may affect the outcome and cannot be controlled by the researcher. An example of a limitation is that a school district might only allow the researcher to collect data during a certain time of the school year, or that selected participants might not answer truthfully or at all (Mansor, 2008).

The most important disadvantage of self-administered structured questionnaires that are distributed by hand, post, e-mail or the Web is that the response rate tends to be low, especially when the questionnaire is too long or is complicated to complete, the subject matter is either not interesting to the respondent or is perceived as being of a sensitive nature. Another disadvantage is that the researcher does not have control over who fills in the questionnaire even though it may be addressed or delivered to the intended participant (Eiselen, 2005).

Although codes, policies, and principals are very important and useful, like any set of rules, they do not cover every situation, they often conflict, and they require considerable interpretation. It is therefore important for researchers to learn how to interpret, assess, and apply various research rules and how to make decisions and to act in various situations. The researcher may overlook other aspects of codes and policies (Louw, 1998).

3.6 CONCLUSION

The overviews of the chapter consist of research design and methodology used in the study. The chapter also described the instrumentation, research type, the sample method and data collection method. The following chapter presents the findings of the study.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

Chapter 3 focused on the implementation process of the research topic in which research design and methodology were discussed as well implemented. The total sample size was 42. The respondents were reached telephonically, through fax, emails, and one-on-one encounter. Of the 44 questionnaires dispatched 42 were received back, 98% response rate.

The research project has utilised quantitative methodology to collect primary data. Completed questionnaires were captured and processed to detect Spearman's correlation coefficient and Pearson correlation coefficient using SPSS. In order to detect variances between variables, frequencies and data are further illustrated using bar charts.

Chapter 4 focuses on the analysis and interpretation of the processed data. The analysis is grouped into research questions that have the sub headings of the survey questions to give critical feedback. The analysis and interpretation of data in this chapter eventually confirms or disproves the results.

4.2 Distribution of Data



Figure 4.1: Age of Respondents

Figure 4.1 indicates that 5 respondents were between 21-30 years, 15 respondents between 31-40 years, 10 between 41-50 years and 7 between 51-60 years and 5

over 60 years. The majority of the respondents were between 31-40 years. This may be that the respondents are better-educated, high earners and have spent generous amount of time dealing with policies. Most of the respondents seem to be integrated and engaged more in policy strategies in a prosperous way than others. It is likely that they are future leaders leaving a path that others will follow.

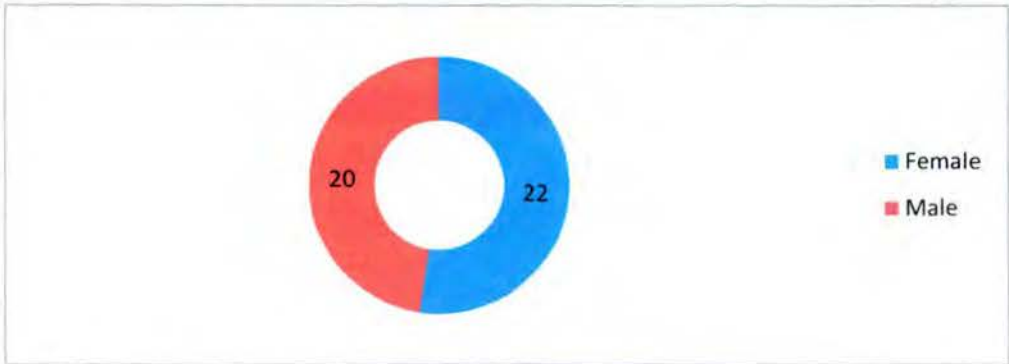


Figure 4.2: Gender of Respondents

Figure 4.2 indicates at majority of the respondents were female (22) which is normally the case during a census. It is obvious that women perceive the policy implementation strategy as a respectable way to do mostthings compared to men. There are differences in how comprehensively men and women balance policy strategies into their daily routines. Among the strategy on policies, women are more likely than men to handle policies regularly on a daily basis. This is in agreement with Priya and Uteng (2009).

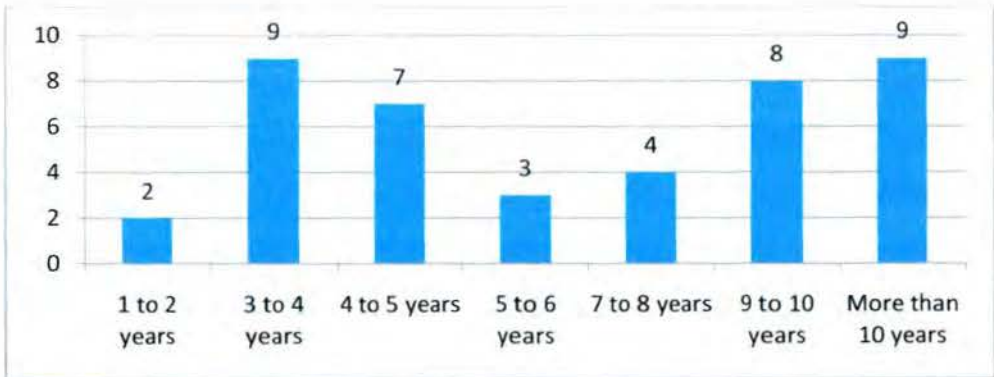


Figure 4.3: How many years have you been working?

Figure 4.3 indicates that respondent's years of working are highest in the age group over 10 years and they are likely to endure because of experience and educational background as at this age they are rather expected to be at the level of higher education. Most of the respondents were working in their first 3-4 years. There were 2 that had worked from 1-2 years. There were 9 workers who had worked from 3 to 4 years. There were also 7 workers from 4 to 5 years. There were 3 workers with 5 to 6 years of work experience. There were 4 workers from 7 to 8 years. There were 8 workers from 9 to 10 years signifying a good spread for the study. Figure 4.2 shows that women have been interacting daily with policies more frequently than men but men are better skilled and at their work place. This is in agreement with Levy (1990).

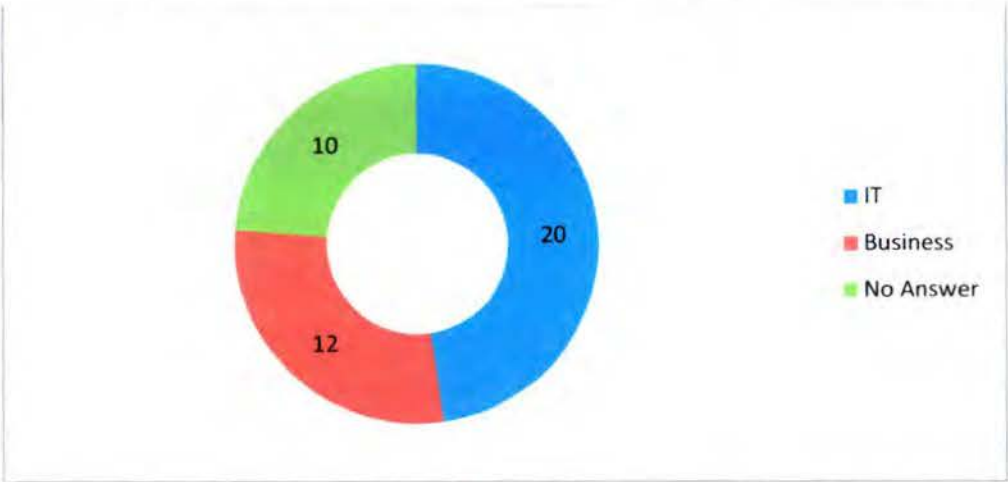


Figure 4.4: The migration to ERP from an IT or Business perspective.

Figure 4.4 indicates that most respondents were involved in policies from an IT perspective. Twenty respondents were involved in policies from an IT perspective, 12 were involved in policies from a business perspective and 10 did not want to render this information. It seems that the respondents who have good policy strategies with an IT perspective interact in policies frequently and more are likely to do all their activities in less than several times a week than the rest of the respondents. This is in agreement with Liu and Kokko(2012).

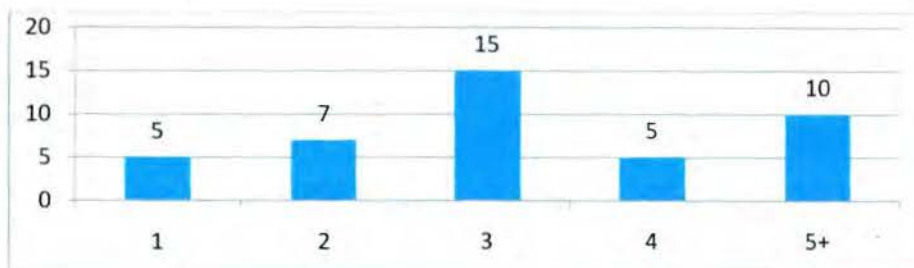


Figure 4.5: The ERP implementations.

Figure 4.5 shows that most of the respondents have been involved in many ERP implementations. Five respondents were involved in 1 ERP Implementation, 7 respondents were involved in 2 ERP Implementations, 15 respondents were involved in 3 ERP Implementation and 5 respondents were involved in 4 ERP Implementations and 10 respondents were involved in over 5 ERP Implementations. This is a good spread from the study and positive. Majority of the respondents have been involved in ERP Implementations and seem to be able to deal with and handle policy implementation effectively Walton (1997) agrees.

This approach to Variance vehicle taxes could be implemented very quickly without causing unfairness to owners of vehicles for which high fixed taxes had been paid. Unlike the existing policy, existing ERP charges would not necessarily increase during the phase-in process because traffic would not necessarily increase. ERP rates might even drop slightly if traffic is initially reduced by the reform. The current policy would influence especially high-use categories such as taxis, as ERP pricing inevitably becomes more important and expensive under this approach (Barter, 2005).

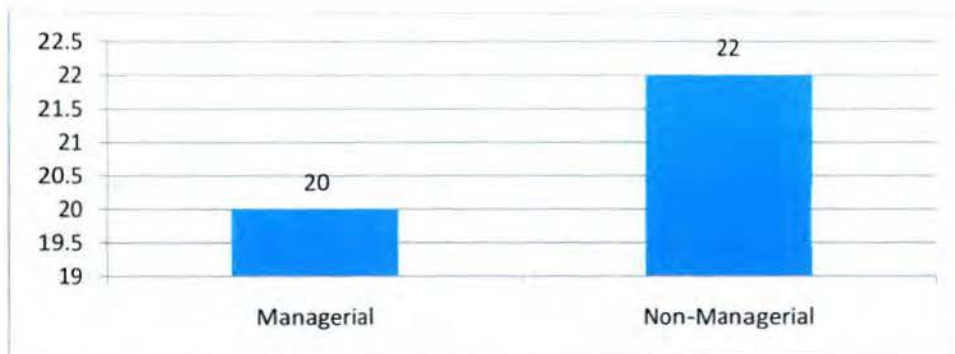


Figure 4.6:The business -ranking

Figure 4.6 shows that more than half of the respondents are in a non- managerial position at work (22). There are 20 in a management position. This is not a positive finding. Fiscal tools to restrain vehicle ownership are relatively little used. Purchase taxes and ownership taxes are widespread but tend to be revenue instruments rather than demand management tools (Barter, 2005).

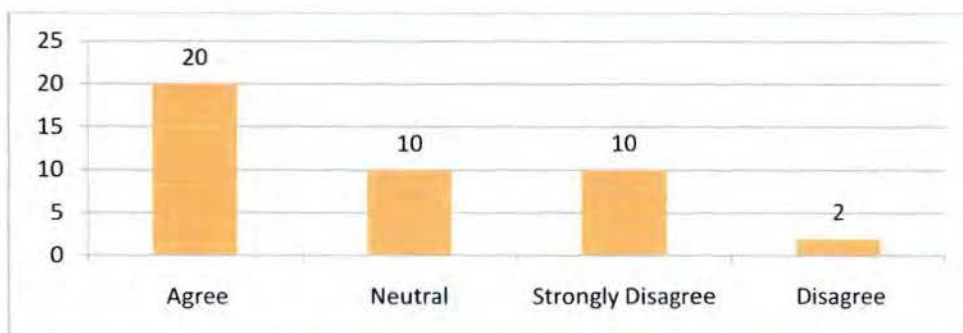


Figure 4.7: Functional area of revenue policy

Figure 4.7 shows that most of the respondents agree that the functional area of revenue policy implementation is within the timelines. Twenty respondents strongly agree that the functional area of revenue policy implementation is within the timelines, 10 are neutral that the functional area of revenue policy implementation is within the timelines. 10 strongly disagree that the functional area of revenue policy implementation is not within the timelines and 2 disagree that the functional area of revenue policy implementation is not within the timelines. The Licence Department is mostly involved and staff members have to be hands-onto ensure that the functional area/s of the revenue policy implementation remains within the timelines to be successful. According to Gallagher and Muehlegger (2011) accelerated domestic adoption of hybrid-vehicle technology plays policy debates. Hybrid vehicles consume less gasoline and emit less pollution per mile than traditional engines with similar performance. Beginning in 2000, federal, state, and local governments in the US experimented with the broadest of consumer incentives to stimulate hybrid vehicle adoption, including income tax credits and deductions, sales tax waivers, single-passenger access to carpool lanes, and waivers of emissions testing, registration and parking fees. Many incentives are generous, worth thousands of dollars and substantially reduce the incremental cost of purchasing a hybrid vehicle.

Although strong interest exists at the federal, state, and local levels to encourage adoption of hybrid vehicles, relatively little is known about how hybrid buyers respond to different types of government incentives. Pollution and urban gridlock can restrict economic growth through adverse effects on human health, productivity, and wasted time. Climate change is another problem that may hinder future development in vulnerable countries. Local pollution, traffic congestion, and climate changes are all classic externality problems requiring corrective government action. Given the seriousness of these problems, it is critically important to address them with policy instruments that exploit, in a least-cost manner, all the behavioural responses for alleviating them (Parry, 2012).

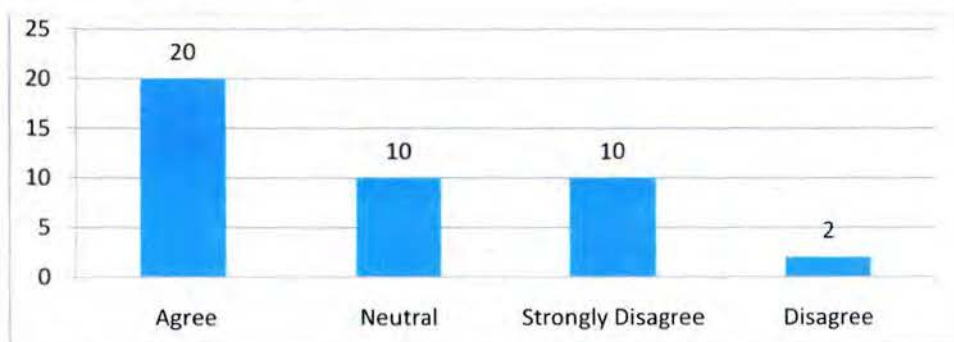


Figure 4.8: The policy assigned to the revenue system

Figure 4.8 shows that the majority of respondents agree that the policy assigned to the revenue system is appropriate. Twenty respondents strongly agree that the policy assigned to the revenue system is appropriate, 10 are neutral that the policy assigned to the revenue system is appropriate and 10 strongly disagree that the policy assigned to the revenue system is appropriate and 2 disagree that the policy assigned to the revenue system was appropriate due to the reason that some of the respondents are in non-managerial positions and have little or no involvement in the implementation.

Regarding the direct information provision, The Service for the Registration of Vehicles only drew citizens' attention to the new deadline by marking the envelopes of the registration letters with a special stamp. The stamp mentioned the new date of commencement. This initiative could only reach the applicants for new license plates

and had little added value. The introduction of the reflecting license plate for the front of a vehicle in Belgium is a prime example of a case in which little attention has been paid to complete, factual, timely, and up-to-date information during the on-going policy process (Gilders, 2005).

The Implementation of public policy can be defined as, what develops between the establishment of an apparent intention on behalf of government to do something, or to stop doing something, and the ultimate impact in the world of action. Even though there is no discussion about the fact that public information provision plays a role in implementing public policy, there is feedback about its act of function when policy intentions and policy decisions are put into practice. Two ways, in which policy can be viewed in the process of implementation, are two points of view regarding the function of public information; it is there to stress the need for clarity and consistency in form and in content in order to increase the probability of compliance and execution of the specific policy. It can also be viewed as a point to stress its importance with regard to conflict resolution. It is considered important in forming trust, increasing cooperation, and increasing the right kind of involvement among actors in the implementation process (Gelders, 2005).

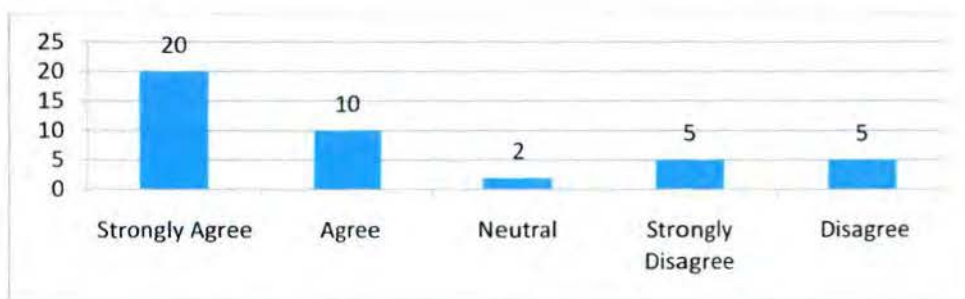


Figure 4.9: The strategies put in place

Figure 4.9 indicates that the majority of respondents agree that strategies have been put in place to ensure that they work effectively and efficiently, but 20 respondents strongly agree that strategies were put in place to ensure that they work effectively and efficiently, 10 respondents agree that strategies have been put in place to ensure that they work effectively and efficiently, 2 respondents remain neutral that strategies have been put in place to ensure that they work effectively and efficiently; 5

respondents strongly disagree that strategies have not been put in place to ensure that they work effectively and efficiently and another 5 disagree that strategies have not been put in place to ensure that they work effectively and efficiently. The licence department must ensure that all staff members are able to work effectively and efficiently with all tasks and with the correct strategies put in place, which will be beneficial overall.

The US HELP programme measures static axle weights at strategic points around the network, but this is only used for enforcing axle load limits. If these weights were used to estimate charges, this could have the distinct advantage of capturing some of the variation in actual axle weights that occurs as loads are delivered and collected at different locations. However, the principal disadvantages of this include the cost of installing and maintaining the roadside equipment necessary for static load measurements and the considerable errors in estimating damage estimates from static load measurements (Dodoo and Thorpe, 2005).

These intermediate-length usage limits would make it necessary to have any system of rebates for motorists who scrap or export a vehicle early with unused tax-paid usage on their permit. Renewals would not be so frequent as to cause high transaction costs and constant kilometre, and the vehicle's puck value. Details of this function and precisely how the impact factors are determined are matters for the detailed design of the road pricing system, Road pricing' limits and clearly, other alternatives are possible (Barter, 2005).

Singapore's land transport policy was merged into one of reducing traffic congestion. The alleviation of traffic congestion was seen as invaluable in helping make Singapore an attractive destination for foreign investment, trade and tourism. The main land transport strategies, which were formulated, based on this policy, and which have remained until today, are:

- (a) Integrated and coordinated land use and transportation planning to minimize travel demand and maximise use of road space
- (b) Expanding the road network, maximizing its capacity and providing accessibility to all parts of the city;

(c) Improving the efficiency of the public transport system and integrating rail, bus and taxi services;

(d) Effective travel demand management by managing vehicle ownership and usage;

(e) Improving traffic management measures.

The Land Transport Authority (LTA), an amalgamation of most of these agencies, now handles the management and administration of the transport sector in Singapore, which, prior to 1995, was fragmented and handled by several transport-related agencies.

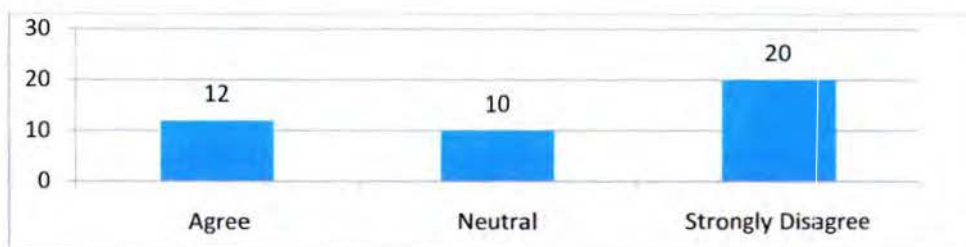


Figure 4.10: The policy installation had enough people resources

A Figure 4.10 shows that the majority of respondents did not have enough people resources assigned to their functional area during the policy installation. Twelve(12) respondents agree that they had enough people resources assigned to their functional area during the policy installation, 10respondents were neutral and, 5 respondents strongly disagree on the issues it clearly shows that most of the respondents did not have the adequate number of people resources assigned to their functional area during the policy installation. If the staff members are not happy with the policy strategy implementation due to lack of resources,this may hinder the policies that have to be completed.

In1968 engine capacity fiscal instruments were usually the most effective policy, while also providing a valuable source of government funds. Cap-and-trade systems are another promising instrument, but in general only if they are designed to mimic tax policies. Singapore's land transport policy highlighted the danger of uncontrolled private car ownership and usage in the context of Singapore's limited land resources.

The alleviation of congestion has since then remained a key objective in helping make Singapore an attractive destination for foreign investment, trade and tourism (Parry, 2012). The valuable outcome in finance resources for local government was that, the more the cars, the revenue tax increase, but these created problems because they ended up with huge amount of data needing to be captured and analysed. The analysed data was used for administrative tax debts and unpaid fines and realise administrative enforcements such as delay cases, practice active measures, and speed up tax returning processes (Chen and Cheng, 2010).

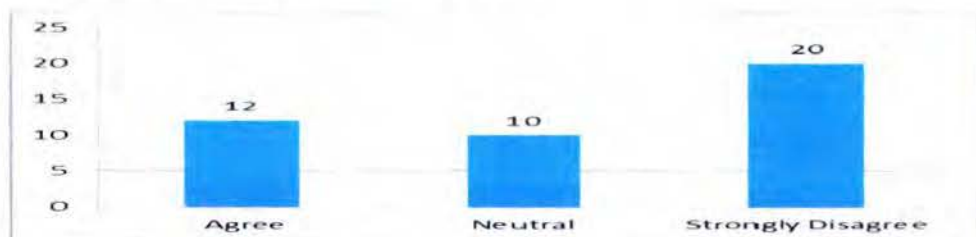


Figure 4.11: Training for the revenue system

Figure 4.11 shows that most of the respondents did not receive a functional area or timeous training that was sufficient for the revenue system. Twenty respondents strongly disagree that they have not received a functional area and sufficient and timeous training for the revenue system, 12 agree that they received a functional area and sufficient and timeously training for the revenue system and 10 respondents were neutral on receiving a functional area and sufficient and timeous training for the revenue system. The organisation should place importance on the revenue system at hand, implement a better structure to be able to relate to policies. This is in agreement with Dever and Richard (2000).

The European regulation regarding the European license plate model intensified the discussion about the usefulness of the Royal and Ministerial Decree. Public Security departments became involved in controlling their use. The underlying issues were money (who gains the revenue from licensing the vehicles and their drivers), road safety, and air and noise pollution. These two policies provided detailed rules on product specification, vehicle registration, driver training, and driver licensing (Sperling et al., 2005).

The Korean Government changed its system to take a more steady approach during the Fourth Development Plan period (1977–1981). It required only large enterprises in selected industrial and service sectors to undertake training of their workers (Lee, 2006).

Grounds for such claims are not difficult to find. Utility related to maintaining gender roles and family structure does not have to mean anything beyond that be parents raise their children according to their own values and though women be overall more productive in household work may not be a politically correct statement, but this in itself does not make it untrue. It seems quite plausible that women have a biological advantage in raising children, and just as it is plausible that girls contribute more in the household work than boys do, this training alone is enough to create a comparative advantage later in life (Priya and Uteng, 2009)

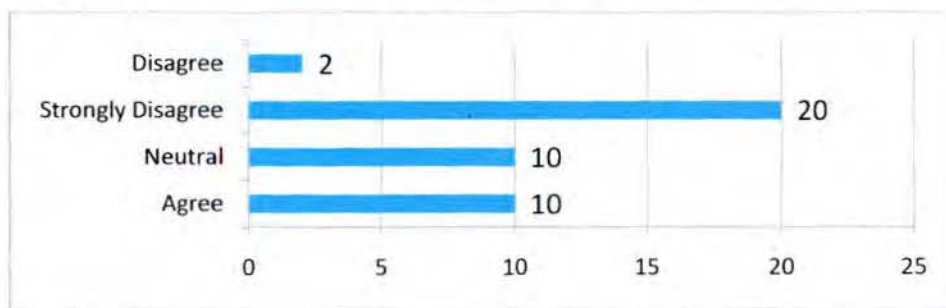


Figure 4.12: Management support and commitment throughout the revenue project.

Figure 4.12 indicates that most of the respondents received sufficient support and commitment throughout the revenue project, 20 respondents strongly agree that they received sufficient support and commitment throughout the revenue project, Two (2) respondents disagree that they did not receive sufficient support and commitment throughout the revenue project, 10 respondents remained neutral and 10 respondents agree that they received sufficient support and commitment throughout the revenue project. This is a negative result and the management needs to improve on giving adequate support and commitment to all staff members to complete the revenue project at hand, as management delegation is essential for the completion of projects.

Another outcome of legislative reluctance to raise fees and taxes that generate transportation revenues has been that legislators have put any potential revenue measure before the voters, as a ballot proposition. Analysts, in response, must seek to recommend options that not only have strong public support, but also are desirable in terms of their equity, ability to generate stable revenue streams, and capacity to encourage environmentally responsible choices by the travelling public. The transportation profession needs to develop a better understanding of how the public perceives a wide range of different revenue options. Knowledge on public opinions on transportation funding by including an unusually wide range of revenue options; the surveys looked at higher taxes (gas taxes, vehicle registration fees, vehicle license fees, and state sales taxes), new tolled facilities (highway lanes, High-Occupancy/Toll lanes, fully-tolled highways, and truck-only lanes), and general obligation bonds (Dill and Weinstein, 2007).

The mechanisms for reducing congestion are several. Included among these are increasing ride sharing (a mainstay of Transportation Demand Management policies in the US, for example), increasing the use of public transport, providing high occupancy vehicle lanes on various roadways, etc. Initially, Singapore, and then several cities in Norway experimented with introducing congestion charges for central cities through political rhetoric, it seems that the use of the private car, congestion and declining shares of the market for public transport are all labelled as negatives that should be set right by some type of policy intervention. The U.K. road system currently grinds towards gridlock (Stopher, 2004).

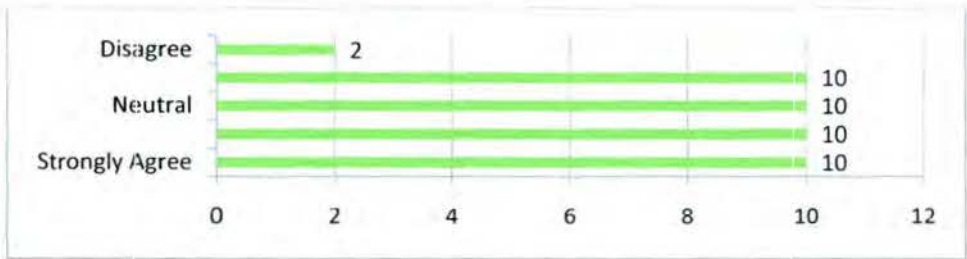


Figure 4.13: Satisfactory accountability was placed on the policy for the revenue system.

Figure 4.13 indicates that the majority of respondents rate that satisfactory accountability was placed on the policy for the revenue system, 2 respondents disagree with that, 10 respondents disagree that satisfactory accountability was placed on the policy for the revenue system, 10 respondents remained neutral while another, 10 respondents agree that satisfactory accountability was placed on the policy for the revenue system and 10 respondents strongly agree. This indicates that the staff members are in between with the rating of the accountability placed on the policy for the revenue system and management needs to address this.

Seik (1997) argues that the level to which transport demand has escalated in developing countries, especially in larger cities, brings faster improvements in road capacity, and also brings greater satisfaction in the department responsible for transport. Urban transport problems are too much and severe, this including accidents, traffic congestion and also impact on the environment badly causing air, noise and water pollution. These problems occur in every city, but at a different level.

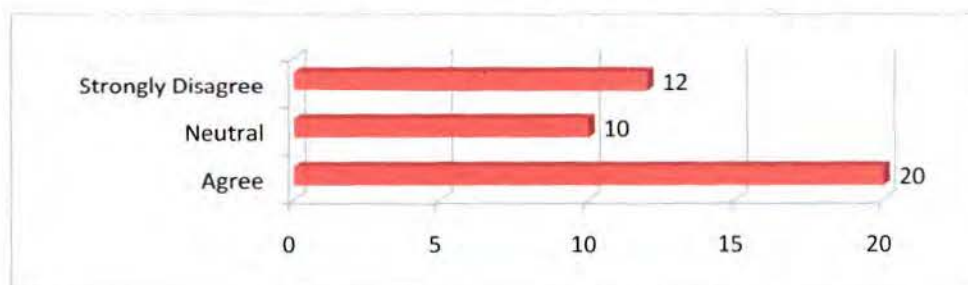


Figure 4.14: The sufficiently Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions.

Figure 4.14 rates that the Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions, while 20 respondents agree that the Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions, 10 were neutral that the Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions but 12 strongly disagree. This is a positive result because, some of the respondents believe that management is lacking when it comes to aiding, monitoring and ensuring that they are fulfilling their functions.

Oliveira-Neto et al. (2012) state that License Plate Recognition (LPR) technology has been widely applied in many different transportation applications such as enforcement, vehicle monitoring, and access control. These systems were developed with the main objective of interpreting the alphanumeric characters on vehicle plates without human intervention. They typically rely on four main components: an imaging acquisition processor, a license plate detection system, a character segmentation and recognition engine and a computer to store the data. In other words, license-plate recognition operation consists in capturing images of moving vehicles, locating license plates, segmenting and recognizing plate characters, and storing information (e.g. plate images, plate numbers, time of passage, location) in a database for online verification or posterior analyses.

In access control, vehicle plates are recognized and verified against a database to allow or deny access to a facility. In traffic monitoring, vehicles are detected at multiple points. Information such as travel time, O-D demand, and route choice, can be estimated subsequently for various planning and operational purposes (Moraes et al. 2012).

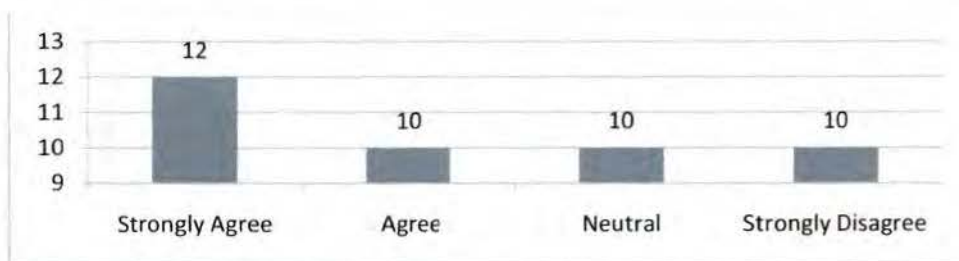


Figure 4.15: Appropriate planning measure for the revenue system implementation

Figure 4.15 indicates that the majority of the respondents believe that appropriate planning measures were in place for the revenue system implementation. Twenty (20) respondents agree that appropriate planning measures were in place for the revenue system implementation, and 10 respondents also agree that appropriate planning measures were in place for the revenue system implementation, 10 respondents were neutral but 10 respondents disagree. This clearly shows that improvement by management is needed to ensure that effective and appropriate measures for all staff members can be put in place for the revenue system to run smoothly.

Since the beginning of this century, China has been promoting the growth of the vehicle market. At the beginning of 2009, the China state council announced the auto industry revitalisation planning, which is part of the top 10 industrial revitalization planning. The auto industry revitalization planning includes a series of measures promoting the growth of the vehicle market. One of the primary goals of implementing policies on vehicle ownership and use in Beijing and Shanghai is to limit the excessive growth of vehicle fuel consumption (Hao et al. 2011).

Two ways in which policy can be viewed in the process of implementation are two points of view regarding the function of public information to pressure the need for clarity and consistency in form and in content in order to increase the probability of compliance and execution of a specific policy. It can also be observed as a point to stress its importance with regard to conflict resolution. It is considered to be important in forming trust, increasing cooperation, and increasing the right kind of involvement among actors in the implementation process (Gelder, 2005).

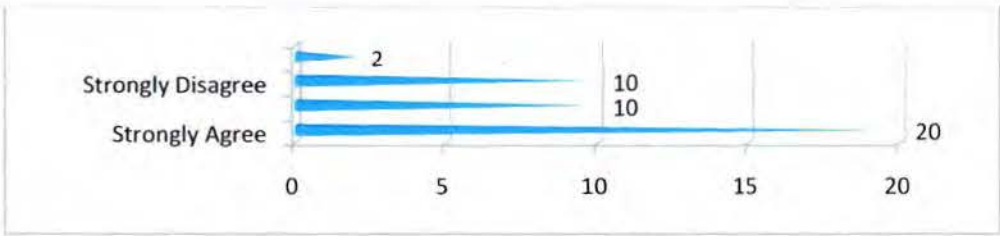


Figure 4.16: The revenue system results

Figure 4.16 shows that most of the respondents believe that the revenue system impact has less process flexibility, real time integration and the need for high data integrity which affect the system of the implementation and design of their functional area. Two respondents disagree that the revenue system impact has such as less process flexibility, real time integration and the need for high data integrity which affect the system of the implementation and design of their functional area, 10 respondents strongly disagree, 10 respondents remained neutral and twenty respondents also agree that the revenue system impact has less process flexibility, real time integration and the need for high data integrity which affect the system the implementation and design for their functional area. This shows that there is a lack of

process flexibility, real time integration and the need for high data integrity regarding information that would be helpful for staff functional areas.

Policy flexibility in the way of keeping the ability to exercise policy choices, efficiency and effectiveness (how well expected charging can be made, or the extent to which key policy goals can be realized) feasibility (including technical feasibility, implementation and transition issues), and equity and public acceptability (Barter, 2005) need to be maintained.

In future, management should learn to share and delegate information regarding implementation timelines, functional areas, flexibility, data integrity, designing, projects, strategies, support, communication and better practices to enhance their staff members to achieve success in the licence department .

The interstate system is safer than other types of roads, so trucks should have a lower overall crash rate. Therefore, comparisons of large truck and passenger vehicle crash rates per unit of travel should control the type of roadway. Mileage and crash data by vehicle type are routinely collected on ticket-controlled portions of many toll roads, where revenue tickets are issued to each vehicle upon entering the system from these tickets, it is possible to determine where each vehicle entered the road, how many miles it travelled, where it exited, and whether it was a passenger or commercial motor vehicle.

This makes it possible to compare passenger vehicle and commercial motor vehicle crash rates on a per mile basis with a high degree of accuracy (Braver et al., 2002). The precise way in which the revenues might be distributed and the precise form of the recycling (e.g. through vehicle registration fees reductions alone, as opposed to some unspecified combination of such fees and 'sales tax reductions') might affect support and help in the design of a better revenue recycling system (Krupnick, et al, 2001).

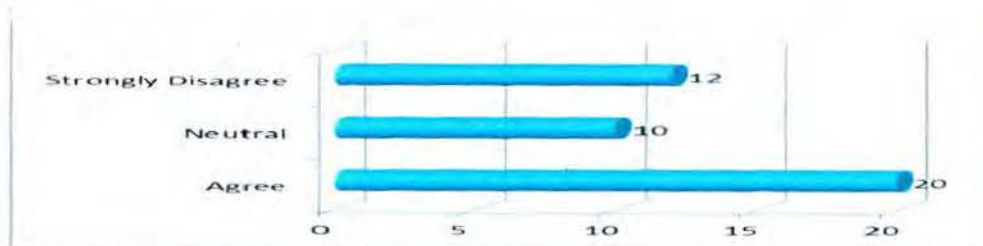


Figure 4.17: The Supporting infrastructure for the revenue system

Figure 4.17 show that most of the respondents believe that the supporting infrastructure for the revenue system is in place and running smoothly. Twelve (12) respondents strongly disagree that the supporting infrastructure for the revenue system is in place and running smoothly, 10 respondents remain neutral, but another 20 respondents agree that the supporting infrastructure for the revenue system is in place and running smoothly. It is clear that the majority of the respondents are experienced, high earners, middle aged (31-41 years) and are well educated to operate the revenue system smoothly with the supporting infrastructure.

Simpson (2003) notes that Conventional Licensing Systems were introduced form of driver control, serving the function of revenue generation, driver identification, and selection and education. The collection of revenue has come to be a less important function, with conventional driver's licenses being used more as a means to ensure that novices meet certain minimal requirements deemed necessary to operate a motor vehicle safely in traffic. In a conventional licensing system that has a learner's permit, there is usually no mandatory time requirement for holding it, so beginners can choose to take the road test for a regular license very soon after receiving a learner's permit. In most conventional systems, to obtain a regular license, the novice must, after fulfilling the condition of the learner's permit (if any), pass a road test to demonstrate competency in meeting minimal vehicle operating standards. If successful, they are granted unrestricted driving privileges. The same 'treatments' are applied to all drivers with only a few weeks of driving experience or those who have had many years of experience. Many jurisdictions have probationary licensing systems but few have been evaluated.

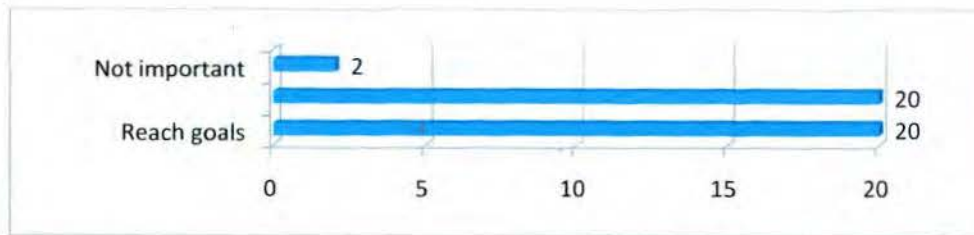


Fig 4.18: Delegation of tasks response

Figure 4.18 indicates that 20 respondents believe in delegation of tasks for skills to reach goals, 20 believe in delegation of tasks for skills to keep them happy and 20 believe it is not important to delegate tasks for skills. The majority of respondents believe that delegation of tasks is necessary to complete and execute their work.

The absence of any attempt to use the system of vehicle excise duty payments to influence consumer behaviour through linking the level of the annual fee to such factors as the engine capacity or the fuel economy of the car was implicitly criticized by the Royal Commission on Environmental Pollution in its report on transport and the environment .The Commission recommended that this omission be rectified with the introduction of a steeply graduated sliding scale of payments related to the fuel efficiency of the car in new condition (Walton, 1997).

There are strong grounds for seeing the broad definition as the more valid as many potential workers are likely to be discouraged in the context of mass unemployment, particularly where the costs of job searching are significant, as is the case for many rural unemployed. Whatever the definition chosen, the level of unemployment in South Africa is very serious (McGrath and Akoojee, 2007).

The learnership was then offered based on these qualifications through the Department of Labour, SETAs, and South African Qualifications Authority. The Joint Initiative on Priority Skills Acquisition (JIPSA) arose from the adoption of ASGI (Accelerated and Shared Growth Initiative). Its task is to elevate the short supply of skills as a national agenda issue. JIPSA's main priorities are engineers, artisans and technical skills (Allais, 2012).

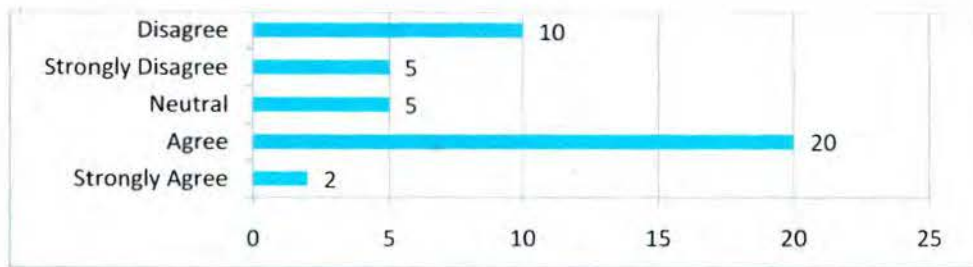


Figure 4.19: Sufficient change management performed throughout the trace of the outstanding money.

Figure 4.19 indicates that most of the sufficient change managements performed throughout the phases or the revenue system were to trace outstanding cash. Ten (10) respondents disagree that there was sufficient change management performed throughout the phases or the revenue system to trace outstanding cash, 5 respondents strongly disagree, another, 5 respondents remained neutral but, 20 respondents agree that there was sufficient change management performed throughout the phases or the revenue system to trace outstanding money and 2 respondents strongly agree. This is in accordance with the view of Chen and Cheng (2010). Most of the respondents depend on the performance of change management to help trace outstanding money through the phases of the revenue system.



Figure 4.20: Participation in change management event

Figure 4.20 shows that the majority of respondents did partake in the change management event. Twenty-two (22) respondents remained neutral but 10 respondents did not want to provide this information. This is in agreement with Braver et al., (2002).

In future, the Licence Department should further open opportunities for staff members and management to partake in the change management event to enhance performance and to run operations efficiently.

For this reason, taxes can appear to be a rather clumsy price incentive that will frequently respond more slowly than changes in the relative cost structures of different firms. As an alternative, advocates of tradable permits consider that they offer a means of reducing environmental pollution that is more market responsive than a system of environmental taxes, and one that is therefore likely to be more effective. Motor vehicle owners are already required to purchase a permit through the annual payment of a licence fee for road tax, before they are allowed onto the public highway. This has to be renewed every twelve months, during which time the Government normally increases the charge in the annual budget. Yet, in contrast to the system of tradable permits, the number of road vehicle tax discs available is, at present, infinite and their cost is fixed. Moreover, the annual payment for a private car is unlikely to be viewed by many as a serious impediment to the ownership of a car when viewed in the context of overall running costs, and is considerably less in real terms than was paid by motorists for a road license (Braver et al., 2002).

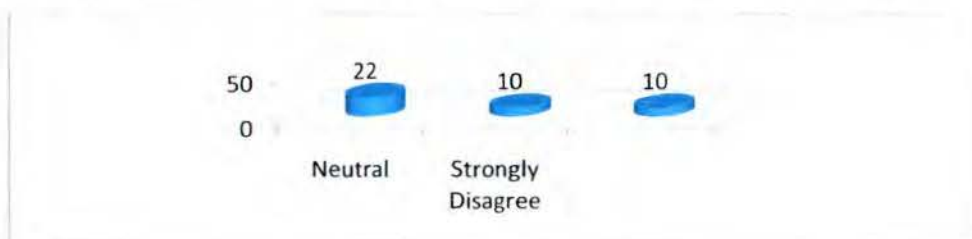


Figure 4.21: Participation in a change management team

Figure 4.21 indicates that most of the respondents constitute part of a change management team. Twenty –two (22) respondents remained neutral that formed parts of a change management team, 10 respondents strongly disagree but 10 respondents did not want to disclose this information. This clearly indicates that most of the respondents had a diminutive part in the change management team and management must address this, as there is a lack of managerial leadership. See Seik (1998) who agrees with this.

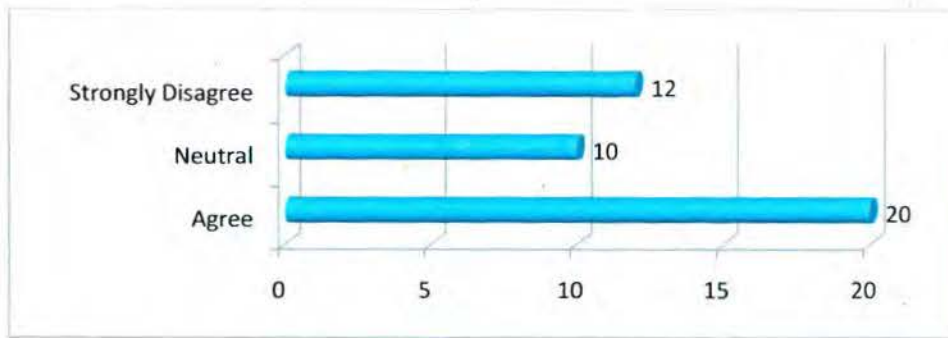


Figure 4.22: The implemented strategies for 2010/2011 financial year.

Figure 4.22 show that the majority of respondents recognize the implementation strategies for 2010/2011 financial year as being effective. Twenty (20) respondents agree that the implemented strategies for 2010/2011 financial year were effective, 10 respondents remained neutral and 12 respondents disagree. It is important that the implemented strategies for a financial year are effective with management delegation over employees to be motivated in their functional areas to enhance better opportunities for the next financial year. This is supported by Chen and Cheng (2010).

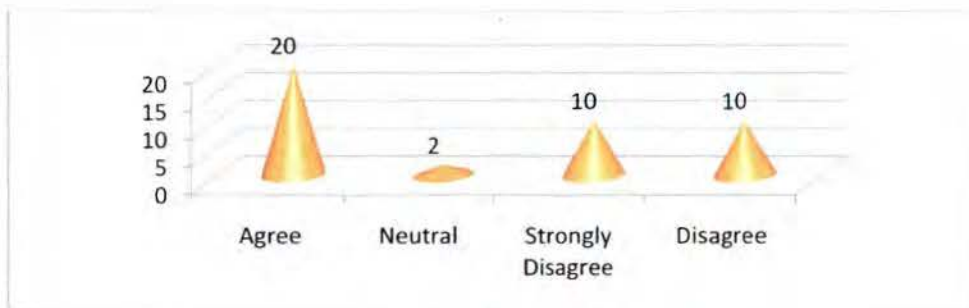


Figure 4.23: The revenue strategy was aligned to the business strategy for the 2010/2011 financial year.

Figure 4.23 shows that most of the respondents believe that the revenue strategy was aligned to the business strategy for the 2010/2011 financial year. Twenty (20) respondents agree that the revenue strategy was aligned to the business strategy for the 2010/2011 financial year, 2 respondents remained neutral but, 10 respondents strongly disagree and 10 respondents disagree that the revenue strategy was aligned to the business strategy for the 2010/2011 financial year (see Stopher, (2004).

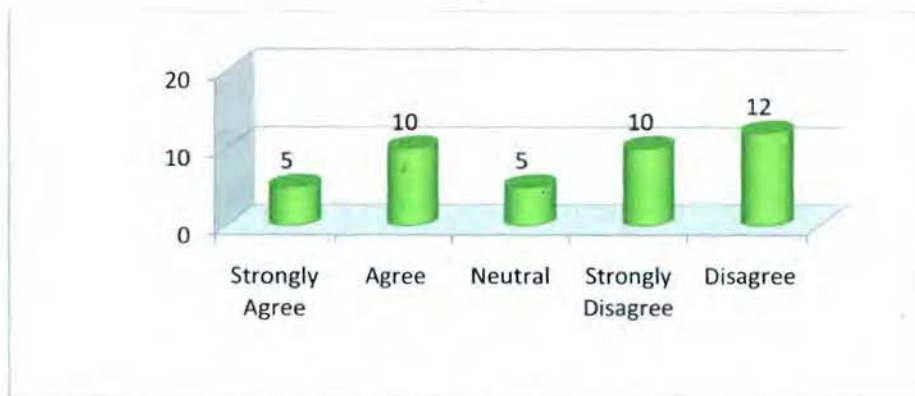


Figure 4.24: The concurrent restructuring and centralisation process.

Figure 4.24 shows that majority of respondents do not believe that the concurrent restructuring and centralisation process had a negative effect on the new strategy of implementation, 5 respondents strongly agree that the concurrent restructuring and centralisation process had a negative effect on the new strategy implementation, and 10 respondents agree but, 5 respondents remained neutral while, 10 respondents strongly disagree and 12 respondents disagree. This is clear as was shown in the previous figure.

4.3 CORRELATION

The correlation between age and years of working during performance period shows - 0.873 – a positive association. This means that people are generally happy with the revenue system implementation. There is some association between gender and age. In other words, it does not matter what your gender is, people should be satisfied.

If the business ranking is portrayed accurately and the age of workers capacity is adhered to correctly, then the correlation is positive (0.850). This means that employees are generally happy with the management performance appraisal procedures on policies.

If the policy assigned to the revenue system is appropriate and worker's years in each role of organising are appropriate then the correlation is positive-0.941. This could be interpreted to mean that people are satisfied in their role of organising in the scope of development in terms of the years they have been working in the organisation.

The correlation between the functional areas received sufficient and timeous training for the revenue system and the strategies that can be put in place to ensure that staff members get skills shows -0.940– a high positive association. This means people are satisfied with the organisation's way of training and skills.

The correlation between the functional areas of revenue policy implemented within the timelines and adequate management support and commitment throughout the revenue project shows +0.817 - a positive association. This could be interpreted to mean that staff members are content with the organisation's way of communication, support from management in their functional areas and especially those between 31-40 years.

The correlation between implementation and appropriate planning measure for the revenue system implementation shows -0.899 – a high positive association. This could be interpreted that people are satisfied with their views on the appropriate measures with the use of the revenue system for planning in terms of implementation in the organisation.

4.4 CONCLUSION

This chapter discusses the findings. It shows that the Licence Departments face some obstacles. The next chapter show managerial guidelines and answers the research questions.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 has focused on data collection, analysis and interpretation in relation to the research objectives. This chapter presents the summary and overview followed by recommendations and conclusion. The recommendations may be used by the Licence Departments in their planning and management revenue systems for policies implementation. Strategic planning is important to ensure that revenue systems are well positioned and enabled to compete well for long-term survival and sustainability.

The purpose of this research was to determine the extent of implementation of the revenue system for policies in the Licence Departments in South Africa. This chapter references the literature discussed in Chapter 2 pertaining to the different functional areas in order to support the conclusions drawn around the research questions.

This chapter comprises a summary of the study, the findings per each research question, and managerial guidelines for opportunities and highlight for future research opportunity in this field of study. Conclusion of the study and recommendations are provided.

5.2 SUMMARY OF THE STUDY

The nature and extent of this alignment is currently unknown. The research was aimed at determining the extent of alignment of the overall revenue systems in the planning and management of the Licence Departments in South Africa.

This study analysed the extent of this alignment through the use of research questions in Chapter 4 that focused on the different functional areas of the Licence Departments prevailing social, political, and economic conditions in history and in the present in their planning and management revenue systems for policy implementation.

5.3 RESPONSE TO THE RESEARCH QUESTIONS

The main findings of this research in relation to each research question are now being discussed. Each question is followed by a discussion of the findings relating to that question.

5.3.1 To what extent does the policy affect the revenue systems?

Chen and Cheng (2010) note that it is necessary to balance a country's financial policy and promote country's prosperities to levy on tax equally. Although taxing power is that, the country implements her rights to collect financial revenues, Tax regulations developed by a legislative body are so complicated that some practical tax problems, such as clearing the owed taxes (overdue payments), processing drawbacks of tax, ruling an appropriate tax rate, and realizing moving to administrative enforcement for delay cases, are derived. Under the amended law to implement the government policies of discouraging wasteful expenditures on luxury items and encouraging energy conservation, vehicle types were classified into four categories:

- small passenger vehicles;
- large passenger vehicles;
- truck; and
- Motorcycles.

Advanced technology in vehicles and computers is raising awareness on specific direct economic incentive style to reduce vehicle emission cost effectively (Krupnick et al. 2001). As stated by Gallagher and Muehlegger (2011), accelerated adoption of hybrid-vehicle technology plays policy debates. Hybrid vehicles consume less gasoline and emit less pollution per mile than traditional engines with similar performance. Beginning in 2000, federal, state, and local governments in the US experimented with the broadest of consumer incentives to stimulate hybrid vehicle adoption, including income tax credits and deductions, sales tax waivers, single-passenger access to carpool lanes, and waivers of emissions testing, registration and parking fees.

Many incentives are generous, worth thousands of dollars and substantially reduce the incremental cost of purchasing a hybrid vehicle. Although strong interest exists at the federal, state, and local levels to encourage adoption of hybrid vehicles, relatively little is known about how hybrid buyers respond to different types of government incentives.

Climate change is another problem that may hinder future development in vulnerable countries. Local pollution, traffic congestion, and climate changes are all classic externality problems requiring corrective government action. Given the seriousness of these problems, it is critically important to address them with policy instruments that exploit, in a least-cost manner, all the behavioural responses for alleviating them (Parry, 2012).

5.3.2 How long does it take to trace outstanding money in the system?

The European regulation regarding the European license plate model intensified the discussion about the usefulness of the Royal and Ministerial Decree. Public Security departments became involved in controlling their use. The underlying issues are money (who gains the revenue from licensing the vehicles and their drivers), road safety, and air and noise pollution. These two policies provided detailed rules on product specification, vehicle registration, driver training, and driver licensing (Sperling et al. 2005).

The Implementation of public policy can be defined as, what develops between the establishment of an apparent intention on behalf of government to do something, or to stop doing something, and the ultimate impact in the world of action. Even though there is no discussion about the fact that public information provision plays a role in implementing public policy, there is feedback about its act of function when policy intentions and policy decisions are put into practice. Two ways, in which policy can be viewed in the process of its implementation, are two points of view regarding the function of public information to stress the need for clarity and consistency in form and in content in order to increase the probability of compliance and execution of the specific policy.

It can also be viewed as a point to stress its importance with regard to conflict resolution. It is considered important in forming trust, increasing cooperation, and increasing the right kind of involvement among actors in the implementation process (Gelders, 2005).

Furthermore, in order to let people understand more about the operation branch office has provided a friendly profile of web site, hoping to present better performance and create good-quality taxation environment for the general public. The service of the web site briefly includes on-line printing of bills for vehicle license tax, land value increment tax and deed tax, on-line reporting and paying for amusement tax, on-line reporting for amusement tax for temporary performances, on-line reporting and collecting for stamp tax, applying File Transfer Protocol (FTP), on-line transporting to correct land value tax registration, applying business registration to check property use, applying illegal-building database to check household registration, and promoting electronic tender documentations for governmental procurement (Chen and Cheng, 2010).

The much greater flexibility of the ERP has made it possible to achieve fuller use of available road space, since such a system enables prices to be different for different short periods, and to make changes in prices very easily in response to traffic changes. The LTA is also already considering the design of a second generation ERP, which could permit distance based zone charging, and would enable usage charges generally to be increased, and ownership charges reduced (Muthukrishnan, 2010).

The principal approaches to reducing vehicle emissions have been ever more stringent new car emission standards enforced against the manufacturer, increasingly stringent vehicle inspection and maintenance (I /M) programmes, and use of low emission fuels. New car emission reductions have been substantial and new fuel formulations have contributed to further significant reductions on a per mile basis. I /M programmes have also contributed to emission reductions of vehicles on the road, but not without controversy or concern over their efficacy and cost-effectiveness. It then

says that the remaining revenues would be used to defray administrative costs and financing of public goods for transportation and emissions reductions.

The implication of these phrases is that the revenues will not be returned to drivers in proportion to their pay-in. The computer-assisted programme assigns tax reductions but that the tax reduction will be Y dollars per year, so they would actually pay Z dollars per year on net (Krupnick et al. 2001).

5.3.3 If a government comes up with the new strategies and revenue system will the public and the staff accept the changes positively?

The economic incentive policies to internalize the external costs of pollution from private vehicles, particularly since technology-based direct forms of regulation seem to be an increasingly costly means of ensuring ambient air quality objectives. Given the impossibility of implementing an ideal "pigovian" tax (based directly on damages) and the prohibitive costs involved in implementing its closest approximation (an undifferentiated emissions tax), a variety of 'second best' policies such as aggregated and differentiated fuel taxes, fees on vehicle miles travelled, scrap page bounties, road congestion pricing, vehicle sales taxes and annual (Johnstone and Karousakis, 1999).

Seik (1998) argues that Singapore's land transport policy is combined into one of reducing traffic congestion. The alleviation of traffic congestion was seen as invaluable in helping make Singapore an attractive destination for foreign investment, trade and tourism. The main land transport strategies, which were formulated, based on this policy, and which have remained until today, are:

- (a) Integrated and coordinated land use and transportation planning to minimize travel demand and maximise use of road space
- (b) Expanding the road network, maximising its capacity and providing accessibility to all parts of the city;
- (c) Improving the efficiency of the public transport system and integrating rail, bus and taxi services;
- (d) Effective travel demand management by managing vehicle ownership and usage;

(e) Improving traffic management measures. The Land Transport Authority (LTA), an amalgamation of most of these agencies, now handles the management and administration of the transport sector in Singapore, which, prior to 1995, was fragmented and handled by several transport-related agencies.

Until now, the application of the use of tradable permits has only been applied to fixed sources of pollution, since it is generally more difficult to measure pollution emissions from mobile points. An example of such a difficulty is provided by the recently introduced Regulations giving powers to the police to fine motorists in charge of vehicles that are not compliant with EU emission limits. The limitation of these regulations depends upon the resources available to the police, and more importantly their vigilance in detecting something, which is often not readily apparent (Walton, 1997).

As a result there, is now heavy competition in the construction of charging stations and related technologies .At present, every enterprise uses its own technical standards to build the charging stations, but decisions regarding the establishment of national standards are awaited and it is obvious that this is an important strategic decision that will influence the relative positions of all the competitors in the industrial sphere (Liu and Kokko, 2012).

At the moment motor vehicle owners are already required to purchase a permit through the annual payment of a license fee for road tax, before they are allowed onto the public highway .This has to be renewed every twelve months, during which time the Government normally increases the charge in the annual budget. Yet, in contrast to the system of tradable permits, the number of road vehicle tax discs available is, at present, infinite and their cost is fixed. Moreover, the annual payment of around 150 for a private car is unlikely to be viewed by many as a serious impediment to the ownership of a car when viewed in the context of overall running costs, and is considerably less in real terms than was paid by motorists for a road license (Braver et al., 2002).

Pollution and urban gridlock can restrict economic growth through adverse effects on human health, productivity, and wasted time. Climate change is another problem that may hinder future development in vulnerable countries. Local pollution, traffic congestion, and climate changes are all classic externality problems requiring corrective government action. Given the seriousness of these problems, it is critically important to address them with policy instruments that exploit, in a least-cost manner, all the behavioural responses for alleviating them (Parry, 2012).

A shift from ownership towards usage taxes is not welfare improving: while a revenue-neutral shift makes the representative car user worse off, a utility-neutral shift leads to a significant loss of revenue to the government. An empirical analysis based on Singapore data, where the government in recent years has taken initiatives to reduce the Certificate of Entitlement (COE) (Muthukrishnan, 2010).

The dynamic relationship between increasing public transport supply and high-priced driver's license may end up excluding people without a driver's license in the job market. This provides a new way of framing the issue of transport and social exclusion (Priya and Uteng, 2009)

Area Licensing Scheme (ALS) in June 1975 they did not join the car co-operative. For non-car owners, more than half gave the main reason that public transport was highly accessible and adequate for their travel needs which stated that it was because the scheme was too costly. The latter group could thus be enticed to become co-operative members if costs were made more adorable. Minor reasons for not joining the co-operative include ignorance of the scheme and non-ownership of a driving license (Seik, 2000).

The primary objective of the VQS was to better control the growth in the vehicle population and reduce the volatility in its annual growth rate. The means to do so was to directly control the number of new vehicle licenses issued each year. Each auction had yielded average revenue of US\$72.6 million. Each quota license issued over the past 12 years had cost an average of US\$12,850. With the introduction of the VQS, the ARF was progressively lowered from 175% as of May 1990. The ARF currently stands at 130% with more volatile growth patterns before the VQS was introduced.

Specifically, from 1975 to 1989, the annual rate of growth of the vehicle population averaged 4.4%, with annual fluctuations ranging with a standard deviation of 4.3%. While the VQS had succeeded in lowering the average annual rate growth of car population and its volatility, it does not eliminate the fluctuations. This is because the VQS does not fix the rate of growth of new vehicle registrations. Each year vehicle quota incorporates a forecast of the number of de-registrations during that year, and therefore the target vehicle population may be missed if the forecast number of de-registrations is not reached or exceeded (Kohl, 2003).

5.4 LIMITATIONS

The study focused only on one grouping in the Licence Departments, which is general revenue systems, policies. It is important that surveys be conducted in the other groups to get a complete picture of challenges in the Licence Departments.

Business activities in other licence departments, which are rural, are close to nothing. Licence Department in Mafikeng alone represent 90% of the respondents, which makes it impossible to compare data.

5.5 MANAGERIAL GUIDELINES

From the results of this study, the following guidelines are important to assist women in turning around their construction companies such that they are able to compete well and become sustainable.

- Communication and disruptive conflicts have always been a problem in construction. Because women are considered as good in heightened communication skills, well-developed interpersonal skills and a soft approach to handling people, their leadership qualities and skills can assist to solve the above problem (Thurairajah et al, (2007).
- Research by Amaratunga et al (2008) Develop a flexible working policy to encourage female to continue their working career during critical periods. Promote self-development- Encourage female student to get involved in extracurricular activities from their school life to develop the ability to hold

leadership position. Conduct training programmes to develop leadership skill giving them a chance to be effective in the roles and to create knowledgeable women managers.

- In the construction industry, women are not only under represented but also their vertical distribution in organisational hierarchy is highly skewed. A key factor in seeking to change the nature of the built environment is being able to reach a senior position in the main stream of management in order to shape the policy making and strategic planning. The large numbers of women in the profession are greatly under-represented in positions of mainstream management. Women possess leadership styles, which are more towards democratic, participative, or transformational styles. Women's leadership is not utilized properly by the construction to overcome its obstacles, the emergence of new management in organisations and new procurement systems can provide more opportunities for women leaders in future. Women leaders' participation in construction project will enhance the relationships between the stakeholders of the construction in future.

5.6 CONCLUSION

The value added is that with a strong understanding of how policies and revenue works the public will be able to comply with the policies. Tax incentives can be used to help reduce pressure on landfills and reduce risks posed by hazardous wastes. One option is pay-by the-bag schemes, which encourage households to generate less waste (Parry, 2012).

The valuable outcome in finance resources for local government is, the more the cars, the higher the revenue tax increases, but this creates problems because they end up with huge amount of data needs to captured and analysed. The analysed data is used for administer tax debts and unpaid fines, and realize administrative enforcements (i.e., moving to courts) for delay cases, practice active measures, and speed up tax returning processes (Chen and Cheng, 2010).

The study also revealed that it is important for employees to discuss changes. Twenty –Two (22%) percentage of respondents indicated that they did not take part in decision in events changes. Employees should get involved when management discusses issues regarding change.

Ten percentage (10%) of respondent indicated that management had not done enough to trace outstanding cash in the revenue system. It is important for the management to communicate with the public and explain the importance and benefits of revenue and its policies towards them. If this is understood, the public will comply.

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APPENDIX A: Matrix

ARTICLES	Def init ion s	Poll utio n and Rev enu es	Calc ulati on and Reve nue	Lic enc e and Rev enu e	Publ ic poli cy and Rev enu e	Ro ad Us er Pa ym ent	Payme nt Metho d for Reven ue	Reven ue and Reduc e Conge stion	p ol ic y	Disad vanta ges and Advan tages
Public support for pollution fee policies for motor vehicles with revenue recycling: survey results1	•	•	•					•	•	
The relationship of age and state license renewal policies to driving licensure rate.2				•	•					•
Public information problems in the implementation of public policy: The long road of the reflecting license plate in Belgium 3				•	•				•	
A new approach for allocating pavement damage between heavy goods vehicles for road-user charging 4			•			•				•
How to pay for transportation? A survey of public preferences in California 5								•		
Reducing road congestion: a reality check6			•			•	•		•	
Rural vehicles in China: appropriate policy for appropriate technology 7						•		•	•	
A vehicle quota integrated with road usage pricing: A mechanism to complete the phase-out of high fixed vehicle taxes in Singapore 8	•			•		•	•	•	•	•
Dynamics of transport and social exclusion.. Effects of expensive driver's license9	•			•				•	•	•
Vehicle ownership and usage charges 10		•	•		•	•	•	•	•	
The distinction between commercial land non-commercial bus services in Germany: Given by nature? 11				•			•			

Taxicab licence value and market regulation 12			•	•		•		•	•	
The potential scope for the application of pollution permits to reducing car ownership in the UK 13	•	•	•			•	•	•	•	
Economic incentives to reduce pollution from road transport: the case for vehicle characteristics taxes 14		•							•	
Online license plate matching procedures using license-plate recognition machines and new weighted edit distance 15				•		•				
Toll road crashes of commercial and passenger motor vehicles 16	•					•		•	•	
Motor-vehicle crash history and licensing outcomes for older drivers reported as medically impaired in Missouri 17									•	
Assessing Older Drivers - Two Case Studies 18				•						
The evolution and effectiveness of graduated licensing 19				•					•	
A unique demand management instrument in urban transport: the vehicle quota system in Singapore 20			•	•		•		•	•	
Operator contexts canning to support high mentation rates for real time license plate recognition 21				•						•
Reforming the tax system to promote environmental objectives: An application to Mauritius 22		•	•			•	•	•	•	
Can Taxes on Cars and on Gasoline Mimic an Unavailable Tax on Emissions?23		•	•					•		
Giving green to get green? Incentivesandconsumeradoption of hybrid vehicle technology 24	•	•	•					•		
Public support for pollution fee policies for motor vehicles with revenue recycling: survey results 25	•	•			•	•	•	•	•	

An efficient method of license plate location 26	•									
Allocation flexibility and price efficiency within Singapore's Vehicle Quota System 27			•	•	•	•			•	
Vehicle ownership restraints and car sharing in Singapore 28			•		•	•	•	•		•
An effective demand management instrument in urban transport: the Area Licensing Scheme in Singapore 29		•	•	•		•	•	•	•	
Comparison of prices between Beijing and Shanghai 30		•						•	•	•
Analysing public awareness and acceptance of alternative fuel vehicles in China: The case of EV 31	•							•		
Who does what in China's new vehicle industry? 32		•	•		•	•			•	
An Improved License Plate Location Method Based On Edge Detection 33		•		•		•		•		
Analysing the structure of informal transit: The evening commute problem 34				•						•
A Delphi-based rough sets fusion model for extracting payment rules of vehicle license tax in the government sector 35	•		•							•
Control of vehicle ownership and market competition: theory and Singapore's experience with the vehicle quota system 36		•						•	•	
Study the Method of Vehicle License Locating Based on Colour Segmentation 37			•	•						
Individual characteristics and stated preferences for alternative energy sources and propulsion technologies in vehicles 38										
License Plate Recognition System Based on License plate recognition system Features 39	•			•						
Quantifying the external costs of vehicle use: Evidence from America's top-selling light-duty models 40		•	•			•			•	

APPENDIX B: Research Questionnaire Development.

No.	Research Question		Survey Question	Variable(s) and/or relationship measured	Question Type	Data type
1	Demographics	1.1	Please tick your age group in the appropriate block:	Demographic question	21-30, 31-40, 41-50, 51-60, 60+ (multiple choice)	Discrete
		1.2	What is your gender?	Demographic question	Male - Female (dichotomous category)	Dichotomous
		1.3	How many years have you been working?	Demographic question	1-2, 3-4, 5-6, 7-8, 9-10, 10+ (multiple choice)	Discrete
		1.4	Where your involvement from a policy or revenue perspective?	Demographic question	Policy, revenue (dichotomous category)	Dichotomous
		1.5	How many policies have you been involved in?	Demographic question	1, 2, 3, 4, 5+ (multiple choice)	Discrete
		1.6	What business ranking do you have?	Demographic question	Managerial, Non-Managerial (dichotomous category)	Dichotomous
2	To what extent do the policies affect the revenue system	2.1	Was your functional area of revenue policy implemented within the timelines	Implementation project success or failure.	Strongly Agree - Agree - Undecided - Disagree - Strongly Disagree (Likert Scale)	ordinal
		2.2	The policy assigned to the revenue system was appropriate.	Implementation project success or failure.	Strongly Agree - Agree - Undecided - Disagree - Strongly	ordinal

				Disagree (Likert Scale)	
2.3				Strongly Agree - Agree- Undecided - Disagree- Strongly	
	The policy installation had enough people resources assigned to it in your functional area.	Implementation project success or failure.		Disagree (Likert Scale)	ordinal
2.4				Strongly Agree - Agree- Undecided - Disagree- Strongly	
	Your functional area received sufficient and timeous training. For the revenue system	Implementation project success or failure.		Disagree (Likert Scale)	Ordinal
2.5				Strongly Agree - Agree- Undecided - Disagree- Strongly	
	Was there adequate management support and commitment throughout the revenue project	Implementation project success or failure.		Disagree (Likert Scale)	Ordinal
2.6				Strongly Agree - Agree- Undecided - Disagree- Strongly	
	Satisfactory accountability was placed on the policy for the revenue system.	Implementation project success or failure.		Disagree (Likert Scale)	Ordinal
2.7				Strongly Agree - Agree- Undecided - Disagree- Strongly	
	Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions.	Implementation project success or failure.		Disagree (LikertScale)	Ordinal
2.8				Strongly Agree - Agree- Undecided - Disagree- Strongly	
	Appropriate planning measure for the revenue system implementation	Implementation project success or failure.		Disagree (Likert	Ordinal

		2.9	The revenue system impact has such as less process flexibility, real time integration and the need for high data integrity, and adversely affects the system implementation and design for your functional area.	Implementation project success or failure.	Scale) Strongly Agree - Agree- Undecided - Disagree- Strongly Disagree (Likert Scale)	Ordinal
		2.10	The Supporting infrastructure for the revenue system is in place and running smoothly.	Implementation project success or failure.	Strongly Agree - Agree- Undecided - Disagree- Strongly Disagree (Likert Scale)	Ordinal
3	How long does it take to track outstanding money in the system	3.1	Sufficient change management performed throughout the phases or the revenue system to track the outstanding money	Change Management	Strongly Agree - Agree- Undecided - Disagree- Strongly Disagree (Likert Scale)	Ordinal
		3.2	Did you partake in any change management event?	Change Management	Yes - No (dichotomous category)	Dichotomous
		3.3	Were you part of a change management team?	Change Management	Yes - No (dichotomous category)	Dichotomous
4	If the government is able to come up with the new strategies and revenue systems will the public and the staff accept the changes positively?	4.1	Do you know what the strategy was for 2011/2012 financial year?	Business strategy alignment	Strongly Agree - Agree- Undecided - Disagree- Strongly Disagree (Likert Scale)	Dichotomous

		4.2	The revenue strategy was aligned to the business strategy for the 2011/2012 financial year i.e. was the implementation appropriate to the business strategy.	Business strategy alignment	Strongly Agree - Agree - Undecided - Disagree - Strongly Disagree (Likert Scale)	Ordinal
		4.3	The concurrent restructuring and centralisation process had a negative effect on the new strategy implementation.	Business strategy alignment	Strongly Agree - Agree - Undecided - Disagree - Strongly Disagree (Likert Scale)	Ordinal

APPENDIX C: Questionnaire

FOR OFFICE USE ONLY: Respondent Code: _____

VOLUNTARY QUESTIONNAIRE FOR LICENCING DEPARTMENT NORTH WEST PROVINCE

"Strategies to implement Policies and Revenue in the Department of Roads Safety and Public Works, North West

Graduate School NWU

University of South Africa

Researcher: Otsile.ClutriciaSenokwane

Supervisor: Prof S Lubbe

Note to the respondent

- We need your help to understand the implementation of policies and revenue systems in the Licensing Department of Road safety and Public Works
- Although we would like you to help us, you do not have to take part in this survey.
- If you do not want to take part, just hand in the blank questionnaire at the end of the survey session.
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.

The questionnaire has four parts:

Part 1 asks permission to use your responses for academic research.

Part 2 asks general personal particulars like your age, gender and home language.

Part 3 to 5 asks about policies and revenue systems implementation and strategies.

How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Also, please be sure to read and follow the directions for each part. If you do not follow the directions, it will make it harder for us to do our project.
2. We are only asking you about things that you and your fellow researchers should feel comfortable telling us about. If you do not feel comfortable answering a question, you can indicate that you do not want to answer it. For those questions that you do answer, your responses will be kept confidential.
3. You can mark each response by making a tick or a cross, or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.

Thank you very much for filling in this questionnaire.

1.1.1 Part 1: Permission to use my responses for academic research

I hereby give permission that my responses may be used for research purposes provided that my identity is not revealed in the published records of the research.

Initials and surname _____ Postal address: _____

_____ Postal code: _____

Contact numbers: Home: _____ Cell: _____

No.	PART 2: GENERAL PERSONAL PARTICULARS Please tell us a little about yourself Please mark only ONE option per question below.	9.	What strategies can be put in place to ensure that staff members get skills? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
1.	I am within this age group ☐ 21-30 yrs. ☐ 31-40 yrs. ☐ 41-50 yrs. ☐ 51-60yrs ☐ Over 60 yrs.	10.	The policy installation had enough people resources assigned to it in your functional area? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
2.	I am a: ☐ Female ☐ Male	11.	Your functional area received sufficient and timeously training for the revenue system? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
3.	How many years have you been working? ☐ 1-2 years ☐ 3-4 years ☐ 5-6 years ☐ 7-8 years ☐ 9-10 years ☐ More than 10 years	12.	Was there adequate management support and commitment throughout the revenue project? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
4.	Was your involvement from a policy or revenue perspective? ☐ IT ☐ Business ☐ None of the above	13.	Satisfactory accountability was placed on the policy for the revenue system? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
5.	How many policies have you been involved in? 1 2 3 4 +5	14.	Project team leaders were sufficiently monitored to ensure that they were fulfilling their functions? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
6.	What business ranking do you have? ☐ Managerial ☐ Non- Managerial	15.	Appropriate planning measure for the revenue system implementation? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree

	PART 3: To what extent do the policies affect the revenue system? Please mark only ONE option per question below	16. The revenue system impact has such as less process flexibility, real time integration and the need for high data integrity, and adversely affects the system implementation and design for your functional area? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
7.	Was your functional area of revenue policy implemented within the timelines? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree	17. The Supporting infrastructure for the revenue system is in place and running smoothly? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
8.	The policy assigned to the revenue system was appropriate. ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree	17. Do you believe in delegation of tasks for skills? ☐ Reach goals ☐ Keep happy ☐ Not important
	PART 4: How long does it take to track outstanding money in the system? Please mark only ONE option per question below	PART 5: If the government is able to come up with the new strategies and revenue systems will the public and the staff accept the changes positively? Please mark only ONE option per question below
18.	Sufficient change management performed throughout the phases or the revenue system to track the outstanding money? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree	21. Do you know what the strategy was for 2011/2012 financial year? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
19.	Did you partake in any change management event?? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree	22. The revenue strategy was aligned to the business strategy for the 2011/2012 financial year i.e. was the implementation appropriate to the business strategy? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree
20.	Were you part of a change management team? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree	23. The concurrent restructuring and centralisation process had a negative effect on the new strategy implementation. ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Strongly Disagree ☐ Agree