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INVESTIGATING EFFECTIVENESS OF VEHICLE TRACKING SYSTEMS IN CURBING COMPANY VEHICLE MISUSE AND INEFFICIENCIES IN ZIMBABWE. A Case study of Reserve Bank of Zimbabwe Transport Department (2020-2024)

BY

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DEDICATION

This research is dedicated to the researcher's wife Saliwe, my children, Constantine Martin, Fortunate Tafadzwa and Calton. When I started this journey, you were always alongside my support in pursuing this program and I could not afford you the attention you deserved. I will not forget your sympathy; may God bless you.

ABSTRACT

This research study seeks to investigate effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe a case of Reserve Bank of Zimbabwe. It has been globally witnessed that vehicle tracking systems has been employed to mitigate company vehicle misuse and inefficiencies but still company vehicles are being seen misused by drivers. The main objective then is to investigate the effectiveness of those vehicle tracking systems on company vehicle misuse. The researcher used both quantitative and qualitative research methods employing questionnaires and interviews as research tools. Simple random and convenient sampling techniques were used. Respondents were drawn from Reserve Bank of Zimbabwe employees. From a total population of 550 employees a sample of 85 was drawn to gather data through questionnaires and interviews which were subjected to quantitative and qualitative analysis respectively. It was presented with the use of tables, pie charts, graphs, percentiles ratings and bar charts. The study found out that while vehicle trackers are important in mitigating company vehicle misuse such fuel theft, picking unauthorized passengers, reckless driving, carrying personal implements, excessive idling and joyriding but the misuse is still being seen. It also found out that this is because of poor technical and administrative controls in monitoring those trackers hence proper supervision, sound company policies, proper monitoring facilities and adequate technological know-how on management were recommended as a synergy to trackers.

(229 words)

Key words. Effectiveness, vehicle tracking systems, curbing, company vehicle, misuse, inefficiencies.

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Table of Contents **Page**

List of tables **Page**

List of Figures **Page**

List of Appendices

CHAPTER I

INTRODUCTION

1.1 Introduction.

Worldwide, issue of loss control and management is a thing of concern in companies with company vehicle misuse contribute to losses and inefficiencies. Basically, for road freight organization to be efficient there is need to invent various technologies which enhance vehicle use and saves business money, emissions reduction and saving fuel (Macbeth, 2019). Ernst and Young (2020), say 50% of companies experience vehicle misuse, with an average annual loss of $16000 per vehicle. This resulted in companies install tracking systems on their fleet globally including Zimbabwean companies. Frost and Sullivan (2020), posited that, vehicle tracking systems have proven to be effective in curbing company vehicle misuse and inefficiencies globally, with a significant reduction in fuel consumption, operational costs, and vehicle theft. Road freight companies which invest in various technological systems are guaranteed success and easy pass through the competition (Sampson et al., 2019). However, employees are still misusing company vehicles. PwC (2018) posited that 45% of employees admit to using company vehicles for personal errand. This chapter provides the background to the

study, problem statement, aim of the study, research objectives, research questions, research hypothesis, significance of the study, research assumptions, delimitations, limitations of the study and definition of key terms.

1.2 Background to the study

Globally, many company employees proved to be misusing company vehicles result in losses being incurred. Company vehicle misuse is a global issue, with 40% of employees reporting personal use of company vehicle (Transportation Science, 2019). Tracking of vehicles through GPS plays a critical role in UK as fleet managers can get information about drivers' conditions as it is rare for them to admit. Drivers' bonuses are target based, and they may force to drive even if they are tired to achieve that, but due to the tracking systems, this can easily be picked up by the controllers and get hold of him or her (Rewire Security, 2020). Fleet tracking has contributed to the safety of drivers and other road users through accidents minimization and controllers are able to use GPS from anywhere and at any time (Devasani,2018). Deloitte Africa (2019) says 55% of African companies report vehicle misuse as a significant concern. The problem of vehicle misuse also affects Southern African region where Deloitte Southern African (2022) posited that 55% of Southern African companies experience vehicle misuse with an average annual loss of R120000 per vehicle. Zimbabwe being an African country is on the concerning mode. Deloitte Zimbabwe (2022) supposed that 52% of Zimbabwean companies experience vehicle misuse, with an average annual loss of $5000 per vehicle. According to Mupakati (2020), categories of company vehicle misuse in Zimbabwe are unauthorized usage, personal use, fuel theft, vehicle maintenance, neglect and overloading.

Boucher et al. (2020), in numerous contexts, fleet management systems are utilized to coordinate service delivery and mobility. The introduction of vehicle security systems in transportation networks by companies witnessed to be of paramount importance in mitigating vehicle misuse and inefficiencies. Road freight companies which invest in various technological systems are guaranteed success and easy pass through the competition (Sampson et al., 2019). McKinsey et.al (2019) say the use of vehicle tracking systems can reduce fuel costs by 10-15% and increase productivity by 10-15%. For the transport business to properly manage its cost structure, there is high need to monitor organizations' vehicles fuel usage by monitoring, controlling and inventing latest technology to cater for fuel stocks (Jagtap,2020).

The systems are designed for the management of fuel usage within a road freight company (Khatun et al, 2019). Berg (2019), propounded that the market for vehicle tracking systems is growing rapidly, driven by increasing demand for fleet optimization and efficiency. KPMG Africa (2019) say 70% of African companies use vehicle tracking systems to improve fleet management. According to Frost and Sullivan (2022), the Southern African vehicle tracking market is expected to grow at a CAGR of 12% from 2020 to 2025 whilst KPMG Southern Africa 2019) propounded that 70% of Southern companies use tracking systems to improve fleet efficiency. PwC Zimbabwe (2019) posited that Zimbabwean businesses consider vehicle tracking system essential for fleet management. Since vehicle misuse has been a global, regional and local phenomenon and intensive employment of vehicle tracking systems has since been done to mitigate the problem, nevertheless, company vehicles are still being misused causing inefficiencies.

1.3 Statement of the problem

There is evidence in previous research that company vehicle misuse has been a global, international, regional and local problem as it causes inefficiencies and losses of various nature. To this regard a mitigatory measure by employing vehicle tracking systems worldwide was done resulted in improvement of the predicament. However, the problem of misusing company vehicles in Zimbabwe is still on. Hence, the researcher is probed to close a gap by investigating the effectiveness of these vehicle tracking systems in curbing company vehicle misuse and inefficiencies.

1.4 Aim of the study

The overall aim of the study is to investigate the effectiveness of vehicle tracking systems in curbing company vehicles misuse and inefficiencies in Zimbabwe to recommend strategies which mitigate company vehicle misuse.

1.5 1.5 Research objectives

The specific objectives of the study are to:

i. Identify types of vehicles tracking systems used in Zimbabwe

ii. Document the forms of company vehicle misuse that causes losses and inefficiencies.

iii. Evaluate the effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe.

iv. Recommend strategies to mitigate company vehicle misuse and inefficiencies even though vehicle tracking systems are in use in Zimbabwe.

1.6 Research questions

To provide the basis for interrogating, observing and measuring specific aspects of the study, the study's main question is what is the effectiveness of vehicle tracking systems in curbing company vehicles misuse and inefficiencies in Zimbabwe? Subsidiary questions of the study are:

i. What are the types of vehicles tracking systems?

ii. What are the forms of company vehicles misuse that causes inefficiencies?

iii. How effective are vehicle tracking systems in cubing company vehicle misuse in Zimbabwe?

iv. What are the possible solutions and recommendations to mitigate company vehicles misuse and inefficiencies in Zimbabwe?

1.7 Significance of the study

The successful completion of this study will benefit companies in curbing company vehicle misuse and inefficiencies in the loss control, risk and security management fraternity towards loss, risk reduction and increasing return on investment. This will built greater confidence to company investors and other company stakeholders as they feel that their interests are secured. It will result in the database of literature to those who will be in working day in day out in fighting loss or risk related issues affecting the company as they will become aware of solutions to fight company vehicles misuse and inefficiencies for example Security managers, Risk officers, Enterprise risk and

Audit managers, loss practitioners and various other tittles meant to fight company losses. The economy at large is going to benefit as it will promote economic efficiency and enhances better living standards. The Bindura University of Science Education (BUSE) will benefit from this research by having a reservoir of the data literature in loss control, risk and security management concepts.

1.8 Assumptions of the study

The study was based on the following assumptions: -

i. Respondents have adequate knowledge of the subject that is vehicle tracking systems in curbing company vehicle misuse and inefficiencies.

ii. Respondents were truthful.

iii. The sample size was a true representation of the target population.

Iv. The respondents' desire to maintain confidentiality was respected.

1.9 Delimitation/ scope of the study

While vehicle security systems are in abundance, this study concentrated on tracking systems. Misuse of company property is witnessed day in day out, but this research study focused on company vehicles only in Zimbabwe and was confined to Reserve Bank of Zimbabwe Transport Department situated in both Harare and Bulawayo.

1.10 Research limitations

The research was restricted to one company or institutions that is Reserve Bank of Zimbabwe Harare and Bulawayo branches which represents all companies in Zimbabwe, however, this institution being one of the biggest in Zimbabwe is a benchmark for all Zimbabwean companies.

Respondents may sometimes be sceptical to participate due to uncertainty on why they had been selected to answer questions instead of others as some feared self-incriminating and political victimization. To address this challenge, the researcher assured respondents that any information collected would be held with utmost anonymity and would be only used for academic purposes.

The research project also attracted some costs to cater for printing, photocopying and research materials; hence the researcher had to use the available resources through use of internet and other information systems technology the likes of WhatsApp and electronic mail which was relatively cheaper.

1.11 Definition of terms

Effectiveness refers to the degree to which an organization achieves its goals and objectives, while also considering the impact on stakeholders and the organization's overall well-being, (Cameron and Quinn 2020). Porter and Heppelmann (2019) "Effectiveness measures how well an organization achieves its intended outcomes, while considering the needs and expectations of stakeholder".

Vehicles tracking system is an intelligent transportation system that integrates GPS and communication technologies to track, monitor, and manage vehicle movement, (Kumar

et al.2020) whilst Ojha et al. (2019) define vehicle tracking system as a network of devices and software that provides real-time information on vehicle location, speed, direction and status.

Haugaard (2019) defines the word curb as to impose limits or restrictions on the power or influence of individuals or groups while Barnett and Duvall (2020) say curbing refers to the exercise of power to limit or restrict the actions or behaviours of others. Daft et al. (2020) defines a Company as a complex system that transforms inputs into outputs, creating value for customers and stakeholders. Company vehicle is defined by Coyle et al., (2020) as a critical component of business logistics, facilitating the movement of goods and services, and people yet Diefenbach et al., (2019) define company vehicle as essentials for business operations, enabling employees to interact with customers, suppliers and partners. Misuse is a form of deviant behaviour, involving the intentional or reckless use of resources for personal gain or to harm others (Katz et al.2019). According to Harrington et al. (2020) inefficiencies mean the gaps between current and optimal performance, often caused by inadequate processes, skills or technology.

1.12 Summary

This chapter covers introduction, research background, problem statement, research aim, objectives, research questions, significance of the study, research assumptions, delimitation, limitations of the study and definition of terms.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

Chapter one provides the tone and overview of the research. This chapter covers literature review, research design, theoretical framework, conceptual framework, empirical evidence and research gap. This will be the coverage basis for interrogating research objectives and questions.

2.2 Purpose of Literature Review

According to Creswell at al., (2020), Literature review is systematic and comprehensive examination of the research literature on a specific topic whilst Saunders et al., (2020), literature review provides a theoretical framework for understanding the research problem.

The is evidence of literature that recorded company vehicle misuse causes inefficiencies and losses as a global, continental, regional and local matter with Zimbabwe not an exception. Ernst and Young (2020) say 59% of companies experience vehicle misuse, with an average annual loss of $16000 per vehicle. KPMG (2019**)** posited that 1 in 5 company vehicles are used for personal purposes without permission. In Africa, PwC (2022) says 43% of companies in Africa experience misuse, with an average annual loss of $10000 per vehicle. Deloitte Southern Africa (2022) says 55% of Southern African companies experience vehicle misuse, with an average annual loss of R1200000 per vehicle. PwC Zimbabwe (2019) supposed that 60% of Zimbabwean companies report vehicle misuse as a significant concern. To counter the problem of company vehicle misuse and inefficiencies, companies resorted to the employment of vehicle tracking systems worldwide. Frost and Sullivan (2020) say vehicle tracking systems have proven to be effective in curbing company vehicle misuse and inefficiencies globally, with a significant reduction in fuel consumption, operational cost and company vehicle theft. KPMG Africa (2019) say 70% of African companies use vehicle tracking systems to improve fleet management. According to Frost and Sullivan (2022), the Southern African vehicle tracking market is expected to grow at a CAGR of 12% from 2020 to 2025 whilst KPMG Southern Africa (2019) propounded that 70% of Southern companies use tracking systems to improve fleet efficiency. PwC Zimbabwe (2019) posited that Zimbabwean businesses consider vehicle tracking system essential for fleet management.

2.3 Theoretical framework

Creswell at al., (2020), a theoretical framework guides the research design, ensuring alignment with the research questions.

2.3.1 What are the types of vehicles tracking systems?

Singh et al., (2020), a vehicle tracking system (VTS) is a technological solution that utilizes GPS, GSM, and IoT technologies to track and monitor vehicles in real time. Vehicle tracking system is a system that uses GPS and cellular networks to track the location, speed, and direction of vehicles, (Kumar et al., 2019). According to Verma et al., (2020), Vehicle tracking system is an intelligent system that integrates GPS, GIS, and IoT technologies to provide real-time information on vehicle location, status and route history. There are Cellular- Based Tracking Systems, according to Al-Fuquaha et al., (2020) which are systems that utilize cellular networks to transmit tracked, making them cost- effective and suitable for urban areas with robust network coverage. Another type of vehicle tracking system is Satellite-Based Tracking Systems. According to Rao et al., (2020), these systems offer unparalleled global coverage, reaching remote and rural areas where cellular networks may not exist. There is another type called Hybrid-Tracking Systems. Kim et al., posited that Hybrid Tracking Systems are the systems that combine the strength of cellular and satellite technologies, ensuring robust coverage across diverse environments.

The automated fleet management systems that constantly track the location of objects or events are known as real-time location (Rathnayaka et al.,2021). When compared to the traditional single mode of GPRS, the embedded GPS real-time monitoring and

alerting system makes up the disadvantage of the large time delay and the uncertainty of the time delay in data transmission (Ebinowen and Umaru, 2020).

Mobile communication, GPS, GIS, RFID, and embedded real-time system design and implementation technologies that support real-time organizational requirements for real-time visibility on transportation, which is subsequent of the fleet management visibility, according to Wycislak (2020). The most advanced technologies use satellite tags for continuous real-time tracking.

Since every business is different, fleet managers are looking for a different solution to difficulties and new ways to optimize business. One way to get the most out of business is to implement GPS tracking (TitanGPS, 2020). Kaskatiiski (2020) defined the telematic system as a component or device used for collecting data. Utilizing telematics-based devices enables efficient fleet management, according to Chaba (2021). Chaba (2021) also stated that speed, position, and fuel consumption level are regularly acquired information in the utilization telematics systems, while information about the driver forceful braking and speeding. Telematics are technical tools that monitor factors related to driving and driving behavior employed by the driver operator, providing crucial information for risk assessment (Chaba, 2021).

2.3.2 Forms of company vehicle misuse

Globally there have been various forms of company vehicle misuse witnessed and recorded. One of them is unauthorized personal use of company vehicles. Singh et al., (2020) posited that this refers to using company vehicles for personal errands, family trips, or social events. Fuel theft is also another form of company vehicle misuse as it causes inefficiencies that is siphoning fuel from company vehicles for personal use or

resale, (Kumar et al.,2019). Verma et al., (2020), company vehicle misuse can be done through vehicle modification that is tampering with or modifying company vehicles without authorization. Excessive idling that is leaving company vehicles idling for extended periods, wasting fuel and increasing emissions, (Jain et al., 2018). Speeding and reckless driving another form of company vehicle. Driving company vehicles at excessive speeds or recklessly and endangering others, (Sharma et al., 2020). Another form of misuse is through carrying unauthorized passengers. Transporting unauthorized passengers or cargo in company vehicles, (Rao et al., 2019). False log entries falsifying log entries conceal misuse or exaggerated business use, (Singh et al., 2020). According to Kumar et al., (2019), another form of company vehicle misuse is vehicle sale that is selling company vehicles parts without authorization. Joyriding using company vehicles for recreational purposes without authorization, (Verma et al., 2020). Jain et al., (2018) say theft of company assets or stealing company assets, such as tolls or equipment, using company vehicles is another form of company vehicle misuse.

A lot of fleet managers acknowledged that vehicles' fuel consumption and expenses are affected by driver behavior (Lundin, 2019). Fleet controllers and managers are facing a great challenge in managing drivers' behavior for the sake of saving fuel and cutting fuel costs. The main aim is to ensure that there is no vehicle abuse and safety is not compromised. Gradual gear shifting and low idling, elimination of using air conditioning when the vehicle is not moving/ productivity improve fleet productivity. Fuel managers are trying to cultivate better driving habits within drivers through minimization of harsh braking, unnecessary speeding and burning fuel with no reason (Rodrigues, 2020).

In Asia-Pacific, fuel theft and unauthorized personal use are common forms of company vehicle misuse, (Singh et al., 2020). In Europe, Kumar et al., (2019) say the most

prevalent form of company vehicle misuse is excessive idling and speeding. Verma et al., (2020), posted that in Northern America, the most common forms of company vehicle misuse are carrying unauthorized passengers and false log entries. In Africa, according to Sharma et al., (2020), vehicle modification and theft of company assets using company vehicles are of significant concerns.

In Zimbabwe, according to Chiwera (2019), forms of company vehicle misuse are driver misconduct (reckless driving, speeding), vehicle abuse (damage, neglect), fuel and asset theft, unauthorized passenger transport and deviation from designated routes. Mukuva (2020) posted that opportunistic misuse (personal errands), manipulative misuse(fuel theft, asset theft), negligent misuse (vehicle maintenance neglect) reckless misuse(dangerous driving) and systematic misuse(organized theft, corruption) are the major forms of company vehicle misuse in Zimbabwe.According to Mupakati(2020), categories of company vehicle misuse in Zimbabwe are unauthorized usage, personal use, fuel theft, vehicle maintenance neglect and overloading.

2.3.3 Consequences of company vehicle misuse

Financial loss is another result of company vehicle misuse. Company vehicle misuse can result in significant financial losses for companies, (Rao et al., 2019). Ernst and Young (2020) say 59% of companies experience vehicle misuse, with an average annual loss of $16000 per vehicle. In Africa, PwC (2022) says 43% of companies in Africa experience misuse, with an average annual loss of $10000 per vehicle. Deloitte Southern Africa (2022) says 55% of Southern African companies experience vehicle misuse, with an average annual loss of R1200000 per vehicle. Chituro (2020) posted that estimated financial losses from fuel theft is $10 million to $20 million annually

while Moyo (2019) says, $5million to $10 million is lost annually due to unauthorized personal use in Zimbabwe. In Zimbabwe, Ncube (2020) propounded that vehicle maintenance cost $8 million to 15 million annually, yet Sibanda (2019) says accident-related costs about $2 million to $5 million annually. Mugano (2020) says $50 million to $100 million is lost in mining industry annually whilst Chidyausiku (2019) says manufacturing industry lost $20 million to $40 million annually in Zimbabwe due to company vehicle misuse. In Zimbabwe also, Mhlanga (2020), says transportation industry lost $15 million to $30 million annually yet according to Nyathi (2019), agricultural industry lost $20 million annually.

Another consequence of company vehicle misuse other than financial losses is reputational damage. Misuse of company vehicle can damage a company's reputation and brand image, (Singh et al., 2020). In Zimbabwe, Chituro (2020) says 75% of customers lose trust in companies due to vehicle misuse yet Moyo (2019) says that 60% of companies experience damage to their brand image. Ncube (2020) on reduced customer loyalty says 50% of customers consider switching to competitors due to company vehicle misuse whilst Sibanda (2019) on decrease business opportunities says 40% of companies experience decreased business opportunities. According to Jain et al., (2018), company vehicle misuses can compromise the safety of employees, passengers, and other road users.

2.3.4 Vehicle tracking systems to mitigate company vehicle misuse.

The introduction of vehicle security systems in transportation networks by companies witnessed to be of paramount importance in mitigating vehicle misuse and

inefficiencies. Chiparo et al, (2022) indicate that the advancement of fleet management technology, a communication system and state of the art management techniques plays a vital role in the development of transport network, sustainability, and adaptable service demands. McKinsey et.al (2019) say the use of vehicle tracking systems can reduce fuel costs by 10-15% and increase productivity by 10-15%. Kebande et al. (2021) pointed out that through the advanced technologies like Internet of Things (IoT) and Cloud Computing fleet management systems can improve productivity in monitoring vehicle utilization.

A fuel tracking system keeps the odometers up to date, keeps the preventive maintenance schedule on target, and allows management to see fuel totals and spending for each vehicle (GSat, 2020). For the transport business to properly manage its cost structure, there is high need to monitor organizations' vehicles fuel usage by monitoring, controlling and inventing latest technology to cater for fuel stocks (Jagtap,2020). The systems are designed for the management of fuel usage within a road freight company (Khatun et al, 2019). Berg (2019), propound that the market for vehicle tracking systems is growing rapidly, driven by increasing demand for fleet optimization and efficiency. Tracking of vehicles through GPS plays a critical role in UK as fleet managers can get information about drivers' conditions as it is rare for them to admit. Drivers' bonuses are target based, and they may force to drive even if they are tired to achieve that, but due to the tracking systems, this can easily be picked up by the controllers and get hold of him or her (Rewire Security,2020).

Fleet tracking has contributed to the safety of drivers and other road users through accidents minimization and controllers are able to use GPS from anywhere and at any time (Devasani,2018). KPMG Africa (2019) say 70% of African companies use vehicle tracking systems to improve fleet management. According to Frost and Sullivan (2022),

the Southern African vehicle tracking market is expected to grow at a CAGR of 12% from 2020 to 2025 whilst KPMG Southern Africa 2019) propound that 70% of Southern companies use tracking systems to improve fleet efficiency. PwC Zimbabwe (2019) posited that Zimbabwean businesses consider vehicle tracking system essential for fleet management. Chituro (2020) says VTS caused 80% reduction in vehicle misuse whilst Moyo (2019) posited that there is 70% reduction in fuel theft because of VTS installation. Ncube (2020) propounded that there is 60 % reduction in unauthorized personal use of company, yet Sibanda (2019) says there is 50% reduction in accident-related costs due to fixing of VTS on company vehicles. Monnerat et al. (2019) say that fleet management allows companies that rely on fleet to minimize the risks associated with vehicle investment, improve efficiency and improve productivity.

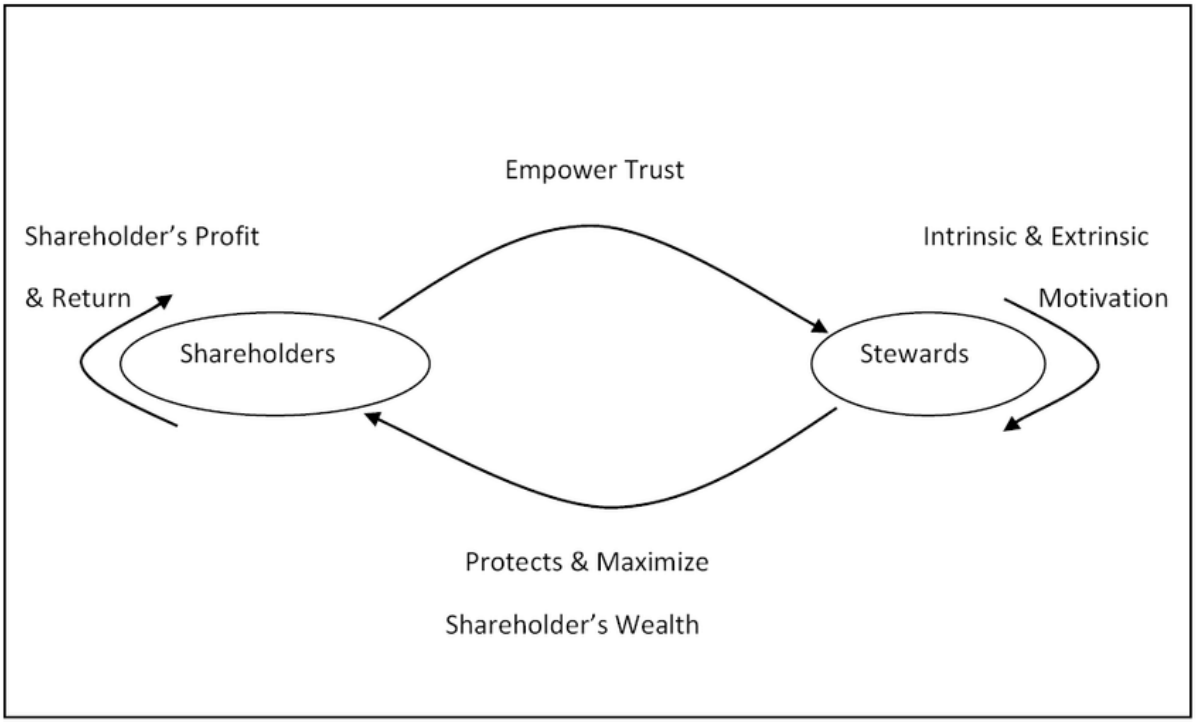
2.4 Conceptual Framework.

A Conceptual Framework is a visual or written representation of the relationships between variable, concepts, or constructs that guides research and analysis, (Creswell,2020) while Miles and Huberman (2019) say Conceptual Framework provides a theoretical structure for understanding complex phenomena and guiding research investigations. According to Polit and Beck (2019), a Conceptual Framework is a logical and systematic representation of key concepts, assumptions, and relationships that underlie a research study.

The Stewardship Theory by Donaldson and Davies (1991 and 1993) is a framework used to analyse the investigations on the effectiveness of VTS on company vehicle misuse and inefficiencies. It is new perspective to understand the relationship between ownership and management of the company. This theory emphasizes the role of

managers in the organization as stewards or oftentimes as caretakers of an organization's resources. The diagram to show Stewardship Theory is on Figure 1 below. Stewardship Theory posits that agents (employees) act as stewards of the organizational resources, including company vehicles, and are motivated to protect and enhance the organization's interests. It has key principles that is agent's primary goal is to maximize organizational performance; agents are proactive and take initiative and agents prioritize organizational interests over personal interests.

Figure 1 Stewardship Theory. (Source: Davies et al.,)



To this regard, employees view company vehicles as organizational resources to be protected. Employees are motivated to use vehicles efficiently and safely and as such employees' report misuse or damage to vehicles. According to Davis et al., (2020), Stewardship behaviour reduced vehicle misuse while Hernandez et al., (2019) say Stewardship behaviour improved vehicle maintenance. Stewardship behaviour enhanced organizational performance, (Lee et al., 2019) whilst Kim et al., (2019) say

Stewardship behaviour increased employee job satisfaction. However, Jensen et al., (2019) criticize this theory saying it put overemphasis on organizational interests.

2.5 Empirical evidence

Moyo (2020) posited that empirical evidence is information or data obtained through direct observation, experience, or experimentation, used to support or refute a hypothesis or theory while Ncube (2019) defines empirical evidence as tangible proof or facts about a research problem or question.

2.5.1 Company vehicle misuse and adoption to vehicle tracking in Europe and Australia

About 30% of road freight accidents are over speeding related and the reason behind fleet managers fostering and improving drivers' safety in Europe. Drivers' safety needs to be given high priority in various road freight companies as they minimize delays, hassled and costs. Major companies in the road freight sector are investing in various technologies with databases which provides information to both the customers and the organization and helps in getting market feedback and suggestion. This way assures a competitive edge to the organization. Bad driving habits are identified, and right disciplinary action is taken (Austin,2020). These days many fleet managers are inventing technology such as cameras in the trucks to monitor incidents such as vehicle following distance, harsh braking, over revving and over speeding. Various updates from the technologies in an organization benefit customer and the organization which work as a competitive tool (Dennison, 2019).

Fleetio is the fuel management software popularly used in the United Kingdom. The main advantage of this system is that it solves the biggest pain points in fleet management. However, many fleet managers in UK spend much time hunting down data from drivers manually which is expensive and time consuming. This demotes proactive and continuous improvement. Companies also use fuel fleet cards in UK, so managers thrive to keep costs low. Fleetio systems integrate all the systems in one location and data telematics devices and petrol cards are automatically uploaded into fleet management software (Flowers,2020).

An overview research paper titled "Investigation into the impact of GPS tracking on company vehicle misuse in Australia" by Ahmed (2020) found out that 75% reduction in unauthorized use, 40% decrease in fuel theft, 30% reduction in accidents, improved driver behaviour and enhanced fleet management as a result of installation of GPS on company vehicles. However same author recommended that there must be clear policies and procedures, provide training for drivers, regular monitoring of vehicle usage, integrate GPS tracking with existing management systems and implement GPS tracking for all company vehicles.

2.5.2 Company vehicle misuse in New York

City of New York, Department of Investigation Report of 2017 on Systematic misuse of City-Owned Vehicles by senior staff members at the New York City Department of Correction overall review of vehicle usage by senior staff found systematic misuse of take-home vehicle privileges and a disregard for City rules and regulations. The pattern uncovered by this report was a top-down practice with the most serious misuse attributed to Commissioner Ponte and members of his senior staff. It also concluded

that regardless of the official reason for being granted take-home car privileges, there is no justification for using vehicles for personal reasons beyond incidental stops to and from work. To remedy the systematic abuse of take-home car privileges and to ensure compliance with City rules and regulations, Department of Investigation recommends the following:

- Department should reissue to all drivers the Citywide rules and regulations that prohibit the use of City vehicles for personal use, and each individual driver needs to acknowledge receipt of the policies
- Department must enforce existing policies related to vehicle usage, including the requirement that drivers maintain trip sheets. Department should implement a centralized (preferably electronic) system of collecting trip sheets
- Department should conduct periodic audits of E-ZPass and gas card usage to ensure that no unauthorized out -of- state travel is occurring

Department should conduct annual audits of vehicle usage. GPS data should be used to aid in these

2.5.3 Effects of GPS tracking

Canada's Drivers Data Management systems assist a lot of road freight companies to have an insight to their drivers' behaviour as well as identifying the skills gap so that right measures are put in place for efficiency through time saving. Managers would also be able to assess the routes and make required changes if need be (Wallin,2020). The software identifies instances of bad driving practices and helps in the improvement in the overall road safety of the fleet (Aries,2020). The systems assist the company to have discussions with drivers and give safety advice to them. Some insurance companies in

Canada are offering discounts for safe driving and data collected from tracking systems. The software also assists in security, accidents and theft. Furthermore, it can track who has access to the assets, cargo and monitor unauthorized access (Cimolini, 2020).

There are many transportation companies that are delivering consignments using a fleet of trucks and delivery vehicles. Along with that, tracking trips are also very important after scheduling. The industry people not only keep track of the consignments but also maintenance with the vehicles and drivers. With the increasing vehicles worldwide, it is not only important to track vehicles but also scheduling the trip. To handle this situation some trucking companies in California using GPS and other crucial software to ensure their customers are safe (Katz et al, 2019.

Olowu (2019), in his research paper titled "The effects of GPS tracking on company vehicle misuse in Nigeria" concluded that 80% of companies experienced vehicle misuse, GPS tracking reduced misuse by 40%, fuel theft decreased by 30%, unauthorized trips reduced by 25% and productivity increased by 20%. Causes of misuse said to be lack of monitoring (60%), poor management (40%), employee dishonesty (30%) and inadequate policies (20%). Benefits of GPS tracking according to Olowu (2019) are improved monitoring (90%), reduced fuel consumption (80%), enhanced security (70%), increased productivity (60%), and cost saving (50%). This researcher however had his recommendations as implement GPS tracking for all company vehicles, develop clear policies and procedures, train drivers and fleet managers, regular monitor vehicle usage and integrate GPS tracking with existing management systems.

2.5.4 Vehicle tracking and sustainable competitive advantage in Nigeria

Harcourt and Osuigbo (2023) in their research paper titled "Vehicle tracking and Sustainable competitive advantage of oil and gas companies in River State, Nigeria" This study examined the level to which vehicle tracking affect sustainable competitive advantage of oil and gas companies in River State by means of a quantitative analysis, which makes palpable that in attendance are ample confirmations that the machineries of vehicle tracking investigated by this existing study were enthusiastically linked with sustainable competitive , bestowing a good judgement to proclaim on it variable having the latent to electrify sustainable competitive advantage, and their nonattendance beseeches business reversion in the long run, thus encumbering sustainable competitive advantage. The study, therefore, concludes that there is a significance and positive influence of vehicle tracking on sustainable competitive advantage on oil and gas companies in River State of Nigeria. The study recommends thus:

1. Oil and gas companies' stakeholders should provide sufficient vehicle tracking programs that promote increase in volume of sustainable competitive advantage activities (organizational responsiveness and organizational agility) in their companies.
2. Vehicle tracking activities of oil and gas companies should be tailored towards exposing their companies' programs towards the accomplishment of attainment that will relate positively with sustainable competitive advantage.

2.5.5 Misuse of company vehicles in Zambia

In Zambia, a report titled "Unauthorized Personal Use of Company Vehicles in Zambia" by Zambia Institute of Chartered Accountants (ZICA, 2020) found out that 75% of

companies reported unauthorized personal use of company vehicles, 60% of respondents stated that employees used company vehicles for personal errands, 45% reported fuel theft and 30% reported unauthorized trips. It found out that causes of company vehicle misuse as lack of clear policies (55%), inadequate monitoring (40%), poor management (30%) and employee dishonest. Consequences of misuse according to the report were financial losses (80%), increased insurance premiums (60%), reduced productivity (50%) and damage to company reputation (40%). ZICA (2020) however, made the following recommendations: develop clear policies and procedures, implement GPS tracking, regular audits and monitoring, employee training and awareness and disciplinary actions.

2.5.6 Use of vehicle tracking systems in South Africa

South Africa road freight companies use various software to monitor and manage fuel on vehicles and systems such as defuel are used. This system is a real time fuel tracking monitoring for fleet management capable of monitoring both petrol and diesel. Company gets real time management trough reading live with GPS and pinpointing the positioning to the control room. The fuel level sensor and probes are directly installed on the vehicle's fuel tank and monitors with accurate readings to the vehicles tracking device. By using the GPS on fuel monitoring, fuel thefts are minimized and cost savings to the company (Digit Fuel Tracking,2020).

2.5.7 Influence of fleet management practices on State-Owned Enterprises in Zimbabwe.

Chiparo et al. (2022) examine influence of fleet management practices on service delivery in State-Owned Enterprises (SOEs) in Zimbabwe. The study concluded that vehicle maintenance, fuel management, driver management and vehicle replacement positively influence service delivery; and that information and communication technology (ICT) moderate the influence of vehicle fleet management practices on service delivery. The study recommended that there is need for regular driver training and vehicle programs encompassing electronic spares tracking.

2.5.8 Adequacy of company vehicle tracking systems in Zimbabwe

In Zimbabwe, small firms find it very expensive to employ those sophisticated technological devices. This has led to organizations outsourcing the services for organizations such as Sendem technology, easy track, Econet car connected, and Track-It. Fuel management systems work hand in hand with the tracking systems where fuel probe sensors are used to manage and report fuel level in tanks. Added, withdrawn and consumed fuel from tanks is reported to the devices through the fuel management technologies and save an organization to get real time data concerning fuel usage as the truck or vehicle is away for distribution and transportation of cargo, thereby contributing to plan and promote pro-activeness by the firm (Econet Connected Car, 2020).

Zimbabwe Infrastructure Report (2019) posited that nothing much has been done in terms of driver data management and many companies are not able to install the latest

technology to monitor drivers' behaviour when he is out for the trip with company's vehicle. This has major effects on the life span of the vehicle, major accidents, high maintenance costs, high fuel consumption and poor turn arounds. Zimbabwe road freight sector companies are suffering a major blow from international competitors due to legging behind technology as evidenced by high hijacking cases for Zimbabwean trucks in transit when moving across South Africa. Quite a few companies are managing to use the data management technologies through various third parties such as Sendem technology, easy track and Econet car Connected. Therefore, the research sought to discover the gap between fleet management practices as compared to the ones being practised in Zimbabwe and come up with relevant solutions to the problem.

2.5.9 Company vehicle misuse in Zimbabwe

In Zimbabwe newspaper articles, Herald (2020), "Company Vehicle Misuse Costs Zimbabwean Firms". "Zimbabwean Company loses$100000 to Vehicle Misuse" (NewsDay, 2019). "Vehicle Misuse: Zimbabwean Firm Sues Former Employee" (The Chronicle,2018).

In court cases in Zimbabwe pertaining company vehicle misuses matters, from Herald and NewsDay, March (2020), Delta Beverages, a leading Zimbabwean beverage manufacturer, sued a former employee for $50000 in damages due to alleged company vehicle misuse. Facts of the case: the employee was issued a company vehicle for official use. The employee allegedly used the vehicle for personal errands and unauthorized trips. Fuel and maintenance costs exceeded authorized limits, and the employee failed to maintain accurate logbooks. The legal issues of the matter reflect breach of employment contract, misuse of company property and unauthorized use of

company resources. In this matter the court ruled in favour of Delta Beverages, the former employee was ordered to pay $50000 in damages and additional costs for fuel and maintenance were also awarded.

Another court case regarding company vehicle misuse between Zimbabwe National Roads Administration (ZINARA) vs. Former Employee (2019) according to The Herald and NewsDay, November (2019) and High Court of Zimbabwe, Harare, Case no.HC 5033/19 where ZINARA sued a former employee for $200000 in damages due to alleged company vehicle misuse and fuel theft. Facts of the case are the employee was the regional manager and had access to a company vehicle and fuel card, audit reports revealed unauthorized fuel purchases and personal use of the vehicle, fuel theft exceeded $50000 and vehicle mileage indicated unauthorized trips. Legal issues revealed are breach of trust, misuse of company property, theft and gross misconduct. The court, therefore, ruled in favour of ZINARA, the former employee was ordered to pay $200000 in damages and additional costs for fuel and maintenance were also awarded.

The Herald October 31, 2023, "ZANU-PF is now installing tracking systems of all party vehicles and those assigned these vehicles breaking road and safety regulations or trying to bully their way through a tollgate without paying or engage on other activity that goes against the policy for servant leadership, will have their vehicles withdrawn" said ZANU-PF chairperson Cde Oppah Muchinguri- Kashiri.

Chronicle August 27,2024 says ZANU-PF members who abused party vehicle for personal gain risk losing them including those who bully their way through toll gates without paying, the party's secretary general, Dr Obert Mpofu, has said. Dr Mpofu said several vehicles have been withdrawn from party cadres and were parked at the party's general headquarters in Harare at the insistence of the first lady, Amai Auxilia

Mnangagwa, who would have come across a driver misusing the party vehicle. “We have seen members carrying thatching grass, mining equipment and some indeed pirating with our party vehicles. Let that practice stop forthwith and if it continues, we will be left with no option but to do exactly like the First Lady. Dr Mpofu emphasized that the vehicles are intended solely for the party business and must be used within the confines of the party and national laws. He warned that the party would not hesitate to take further action against those who continue to abuse the vehicle, as such actions tarnish the party’s reputation. This warning echoes similar concerns raised at last year’s National People’s Conference, where party chairperson Oppah Muchinguri- Kashiri cautioned members against using their party affiliation to evade toll fees or engage in other forms of misconduct.

The Herald, NewsDay and The Chronicle (2020) reported a Zimbabwe Airways $10 million Vehicle Misuse Scandal as well as Zimbabwe Airways internal audit report (2020). Zimbabwe Airways, the national airline, face allegations of vehicle misuse involving $10million. The scandal implicated senior management and employees. Key facts of the are unauthorized use of company vehicle for personal errands, fuel theft and unauthorized fuel purchases, vehicle used for side businesses and personal gain and lack of proper vehicle maintenance and record -keeping. Audit report revealed discrepancies in fuel consumption and vehicle usage by Zimbabwe Anti-Corruption Commission (ZACC) as well as by Forensic external Auditors. Findings were that: $5million in unauthorized fuel purchases, $3million in vehicle maintenance costs without proper documentation an $2million in vehicle insurance claims without proper procedures. This resulted in suspension of senior management and employees involved, criminal charges laid against those implicated and implementation of new vehicle management policies.

Zimbabwe Manpower Development Fund (ZIMDEF) faced allegations of vehicle misuse involving $400000 according to The Herald and The Chronicle (2019). The scandal implicated senior management and employees. Key facts of the matter are unauthorized use of company vehicles for personal errands, fuel theft and unauthorized fuel purchases, vehicles used for side business and personal gain and lack of proper vehicle maintenance and record keeping. Findings were that $200000 was spend on unauthorized fuel purchases, $120000 in vehicle maintenance costs without proper documentation and $80000 in vehicle insurance claims without proper procedures. High Court of Zimbabwe, Harare, Case No HC 3456/19 and ZIMDEF vs Former Employees, Judgement, 2020 also refers.

2.6 Research gap

Research gap according to Sutton et al. (2019) involves areas where current knowledge is incomplete, inconsistent or inadequate while Saunders et al. (2019) say a research gap exists when there is a need for further investigation to clarify, confirm or challenge existing knowledge. Previous researchers used only quantitative analysis in their studies which then is countered in this paper as it used both qualitative and quantitative research design. Research from previous scholars were contacted mostly in gas and oil fleet companies specializing in carrying cargo with little or no research carried out in the banking industry Central Banks to be specific where huge sums of money are transported from one place to another within Zimbabwe which the researcher is feeling to be a gap then need to be filled.

2.7 Summary

The literature review chapter is a set of discussions on theoretical framework, conceptual framework and empirical evidence of the study covering the views of various scholars in answering the research questions.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Introduction

Creswell et al. (2020) defines research methodology as a comprehensive plan for conducting research, integrating research questions, design methods and analysis. According to Batallan (2019), research methodology is a set of guiding principles and presumptions regarding the growth of knowledge, analyzing assumptions, guiding concepts, and investigative methods are all part of this process. This chapter covered research design, population size, sample size, sampling techniques, research instruments, data presentation and data analysis, data reliability and validity as well as ethical considerations.

3.2 Research design

The research design is a structure that outlines the factors that were considered when choosing the right methodology, how respondents were chosen, and how the data would be analyzed (Sileyew, 2019). The research design is the strategy for integrating

conceptual research concerns with pertinent and doable empirical research (Luck, 2019). According to Sutton et al. (2019) research design requires consideration of research purpose, theoretical framework, and methodological approach. A case study was used in collecting data for the findings. According to Yin (2020) a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-world context. A case study of Reserve Bank of Zimbabwe transport department was used in investigating effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies. The data was gathered using questionnaires and structured interviews as research instruments thereby reflecting both quantitative and qualitative research or triangulation. This is because there are some drawbacks posed by questionnaires that could be addressed using interviews and vice versa. Both primary data obtained from the said research instruments will be analysed as well as secondary data gathered from books, journals and read texts.

3.3 Target population size and sample size

The target population is the group that the researcher wants to describe, explain or predict**.** The target population in this study is respondents drawn from employees of Reserve Bank of Zimbabwe in Harare and Bulawayo branches. According to Saunders et al. (2019), population size is the total number of individuals or entities within the population boundaries. Yin (2020) posits that sample size refers to the number of cases or observation included in the study, yet Mupakati (2020) says sample size is the number of participants or observations selected from a population for research study. Chiwera (2019) defines sample size as a subset of individuals or cases chosen from a

larger population. A sample size was arrived at using Yamane's formula and table below.

$$n = \frac{N}{(1+ N(e^2))}$$

Simplified $n = N/(1+N*e^2)$

Where:

- n= sample size
- N= Population size
- e= Margin of error (as decimal)

|1% (0.01) |N/(1+0.0001N) |

|3% (0.03) |N/(1+0.0009N) |

|5% (0.05) |N/(1+0.0025N) |

|10% (0.10) |N/(1+0.01N) |

Population size (N) =550

Margin of error(e)=10%

n=550/ (1+0.01*550)

n=550/ (1+5.5)

n=550/6.5

n=84.6 Therefore, n=85

3.4 Sampling techniques

Creswell et al. (2020) say sampling techniques are methods for selecting a sample from a population. Probability sampling technique was used. Simple random sampling techniques was used as the researcher could gather accurate data from all of employees

of Reserve Bank of Zimbabwe and would be having equal chances of being selected in providing data thereby catering for bias in data collection. According to McCombes (2022), any member of the population with a higher degree of homogeneity is likely to be chosen for a sample and most often it is used in quantitative research. However, convenience sampling was also employed to cater for time and cost that maybe associated with the research as participants will be chosen according to their convenience. Non-probability sampling is a selection technique that use non-random methods to choose a group of participants for a study (Anon, 2022). Sampling at the researchers' convenience is preferred, according to Anon (2022). The sample members were selected according to their availability and willingness to furnish information. The instruments used to collect information by the researcher were questionnaires and structured interviews to get quantitative and qualitative data respectively. Questionnaires were dispatched online using emails while telephone interviews will be used.

3.5 Research Instruments

Tools used to collect and measure data in research studies (Mupakati,2020). Chiwera (2019) defines research instruments as instruments designed to capture and record data accurately while Mukuva (2020) defines it as methods and tools used to gather, process and analyse data. The instruments that were used in this research study are questionnaire and structured interviews. The questionnaires challenges were addressed through employment of interviews and challenges posed by interviews were addressed by use of questionnaires thereby ensuring validity and reliability of data and conclusions.

3.5.1 Questionnaire

Mukuva (2020) says questionnaire is a tool used to collect primary data through structured questions while Mupakati (2020) says questionnaire is a systematic set of questions designed to collect data from respondents. Open ended, closed ended, Likert scale and ranking scale questionnaires were used. Questionnaires allow for quantitative analysis of data, assist comparison and generalization of data and it allows collection of large amounts of data efficiently. Questionnaires were dispatched and administered through emails of respondents. This could guarantee anonymity and confidentiality of respondents' identities and information. The respondents were free to answer the questions at the convenience of their time. However, the attitudes and feelings of participants could be qualitatively deduced.

3.5.2 Interviews

Multiple social science scholars have reiterated the importance of interviews as a tool for data collection in qualitative studies (Barrett and Twycross, 2018). Mupakati (2020) defines interviews in research methodology as a qualitative research method involving face to face or phone conversations to gather in depth information. Interview is a tool for exploring participants' experiences, opinions and perspectives, (Chiwera 2019). Semi structured and structured questions was used. The researcher tends to use semi-structured interviews to enable the interviewee to elaborate on certain issues,(Saunders et al.2019). Interviews provide rich, flexible and qualitative data. High response rate was assured and there was in-depth understanding of participants' perspectives.

However, there was interviewer bias in data interpretation, sampling selection and influence. Participants' confidentiality was also compromised.

3.6 Data presentation and analysis

Yin (2020) says data presentation involves displaying data in a way that facilitates analysis and interpretation while Creswell et al., (2020) define it as the process of communicating research findings in a clear and concise manner. Miles et al., (2019) define data analysis as the process of examining data to answer research questions, test hypothesis or explore concepts. The process of inspecting, cleaning, transforming and modelling data to discover useful information, (Mouton 2020). Descriptive analysis was used to summarize data using data visualization with the help of charts, graphs and tables. A combination of quantitative and qualitative data was analysed. A software called SPSS will be used in data presentation and analysis. It is called Statistical Package for the Social Sciences.

3.7 Data validity

The researcher paid attention to data validity that means the extent to which the research instruments adequately reflect the concept or object that was under study. According to Saunders et al., (2023), validity is the degree to which results obtained from the analysis of the data represent the phenomenon under study. How precisely the data acquired represents the study's variables is what is meant as validity. For example, use case analysis as means of gathering data. It is true that in order evaluate certain process, there is need to look for what has been done by past researchers. The researcher would resort

to previously tested and used methods of data collection. The researcher expected participants who seen not to be relevant to the situation under investigation. The participants in this study were drawn from employees who actually know much about the transport department systems of the case under analysis. The research was strictly on the quantitative and qualitative nature and all participants were met personally during interviews while the company transport policy and files were physically inspected. Internal validity was also observed which means that necessary precautions were taken to ensure that any other possible explanations were eliminated. Triangulation refers to the use of multiple methods or sources to cross-verify results (Denzin,2020). The research was designed to show triangulation thus seeking to address the short comings of both quantitative and qualitative methods to come up with a balanced input on specific point under discussion. The researcher ensured that the research was valid, by comparing and verifying it against the interviews, literature and case analysis.

3.8 Data Reliability

Creswell (2020) defines reliability as the consistency of measurement, or the degree to which a measure yields consistent, yet Bryman (2019) says reliability assesses the stability and dependability of measurement. The researcher was guided by the objectives of the study, the research questions and the key concepts in designing the questionnaire and in formulating interviews questions. The researcher asked the same question to each of the respondents in the category to ensure reliability of the study. The researcher would then be able to demonstrate that his focus was on a clearly demarcated phenomenon. The pilot testing of the questionnaire gave the researcher an insight into the answerability of questions and feasibility of responses. The pilot study thus allowed

possible problems to be identified and corrected before administering in the study. During the analysis process, the researcher met the participants in interviews rooms that were kept private, quiet and free from mental distractions, so as to promote honest communication. The researcher could also ask the respondents how they will be interpreting the questions. At the same time the researcher watched and noticed the non-verbal communication on the part of the participants that might have signified discomfort or dissatisfaction. Saunders et al., (2023) posit that reliability is a measure of the degree to which a research instrument yields results or data after repeated trials using the Cronbach's Alpha in SPSS, the data dependability for this study was evaluated.

3.9 Ethical considerations

Resnik (2019) defines ethical consideration as applying moral principles to ensure research is conducted responsibly. Authority was sought from respective departments to conduct the study, and the researcher was able to preserve the anonymity of respondents yet Beauchamp et al., (2019) say ethical consideration prioritize protecting participant's rights, dignity and well-being. The researcher was also very careful not to force respondents into the study thereby considering the issue of consent. Resnik (2019) "The participant's right to discontinue participation in a study at any given time". Sieber (2020) "A fundamental principle ensuring participant's autonomy and dignity". To this regard, respondents were free to opt in and opt out that is to say they had the right to withdraw from participating even if though they were consenting. Interview sessions were not conducted at Reserve Bank of Zimbabwe Transport Department offices in order to further protect the identity of respondents. Arrangements will be made to meet

up with respondents at convenient environment. This decision was made following the testing of the questionnaire and interview questions. It was apparent that many respondents were not comfortable to be seen with the researcher at their workplaces hence use of telephone interviews was of great importance.

While questionnaire commenced with a preamble that assured respondents of the purpose of the study and of the confidentiality of their responses, the researcher commenced each interview by explaining the study topic and assure respondents of the confidentiality of their information. The researcher was able to maintain confidentiality of company information and source protection. The duty to protect participants' privacy and maintain confidentiality of the data (Sieber, (2020). According to Bryman (2020), informed consent is a process where participants provide explicit consent, informed by comprehensive disclosure.

The researcher was also careful on the issue of anonymity by not disclosing the identities of participants. A research technique where participant's identities are unknown or unlinked to their data (Creswell, 2020).

3.10 Summary

This research methodology covered the type of research design to be adopted, population size, sample size, sampling techniques, tools of the research that is questionnaires and interviews, data presentation and analysis, data validity and reliability as well as ethical considerations. This, therefore, was a set guide of how data would be gathered, discussed and analysed for the chapter four.

CHAPTER IV

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

The previous chapter presented the method of research adopted in this study. The underlying chapter now focuses on the presentation of quantitative and qualitative data gathered through the questionnaire and interviews conducted. This chapter collates and organizes the data into understandable form to reveal its meaning. Quantitative data is presented in tables, charts, and graphs while qualitative data is presented in descriptive analysis and discussion on the views of respondents.

4.2 Research Instruments and Response rate

The response rates of instruments used in this study (questionnaire and interviews) were analysed to validate their employment and their knowledge. Sataloff, R., and Vontela, S, (2021) posit that, a high response rate strengthens the validity of your findings, as it suggests that your data is more likely to be representative of the target population you aimed to survey. In analysing the response rates, the researcher sought to establish reliability levels of data provided and accuracy in order to give the study credibility.

4.2.1 Analysis of Questionnaire Response rate

A total of 85 questionnaires were administered among Reserve Bank of Zimbabwe employees in both Harare and Bulawayo branches and the distribution is as follows; Distribution of Questionnaires (n=85).

Table 2.1 Source: Primary data

Harare	Bulawayo	Total
68	17	85

The data presented in Table 2.1 above shows distribution of questionnaires among respondents. Reserve Bank of Zimbabwe employees Harare branch constitutes 80% of the total staff of the bank with the remaining 20% occupied by Bulawayo branch and as such the questionnaires were distributed according to the ratio of 4:1. Table 2.2 below shows the response rate of questionnaires by respondents. Percentage response rate for questionnaires (n=79).

Table 2.2 Source: Primary data

Respondents	Administered	Responded	%Response Rate
RBZ Employees	85	79	92.9%

Table 2.2 above shows response rate of questionnaires by Reserve Bank of Zimbabwe employees in the study. The distribution of questionnaires among Harare and Bulawayo staff was according to the ratio of 4 as to 1 respectively. 79 questionnaires were responded out 85 administered representing a response rate of 92.9%. According to Kreuter, F., and Peng, J. (2020), researchers should analyse non-response rates to facilitate assessment of potential bias. The non-response rate to the targeted distribution is hereby summarized by the Table 2.3 below.

Analysis of non-response by target distribution (n=6).

Table 2.3 Source: Primary Data

Respondents	Administered	Returned	%Non-Response
RBZ Staff	85	6	7.1%

Table 2.3 above shows the distribution of non- response from the targeted sample. From the 85 questionnaires distributed, only 6 were returned uncompleted thereby representing a non-response rate of 7.1%. A high response rate does not necessarily guarantee high-quality data or representative samples (Davern, M., and McAlister, A. ,2022).

4.2.2 Analysis of Interview achievement rate.

In the study, a total of 28 interviews were scheduled and is as tabled below.

Analysis of Interview achievement rate(n=28).

Table 2.4 Source: Primary Data

Respondents	Scheduled	Conducted	%Achievement
RBZ Staff	28	28	100%

Table 2.4 above shows the scheduled interviews. A maximum of 28 interviews were planned from respondents and all of them were conducted through face to face interviews and telephone representing a 100% achievement. This was because of availability of telephones and convenience of the researcher to the respondents.

4.3 Analysis of demographic detail of respondents

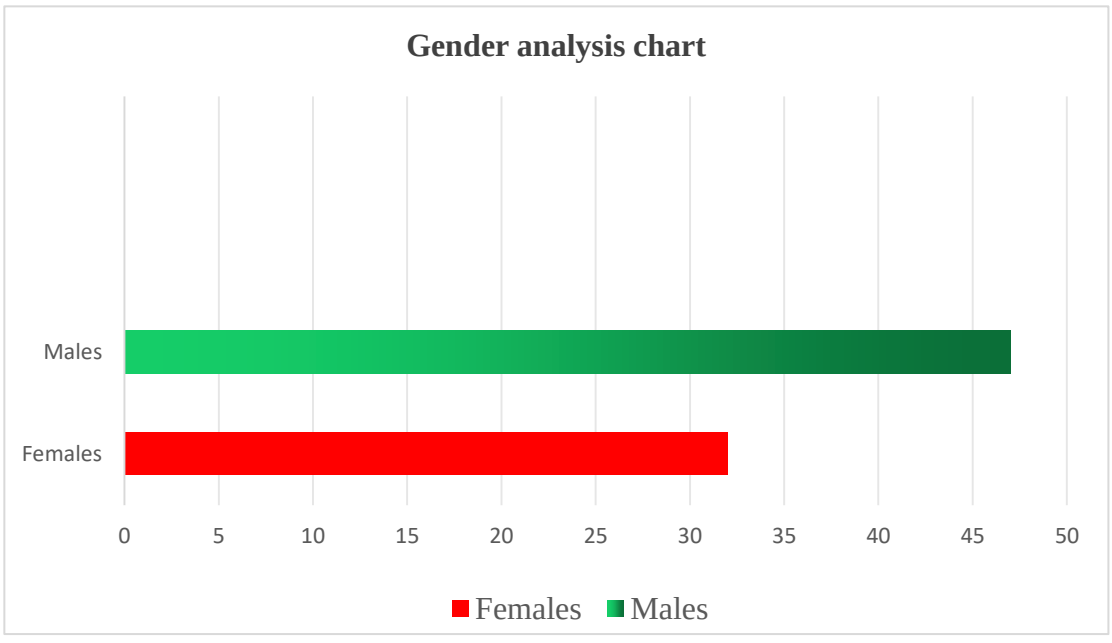
To assess the credibility of data gathered from respondents, the study analysed demographic details of respondents. Personal attributes in respect to gender, age, work experience and educational qualifications.

4.3.1 Gender Analysis

Gender analysis informs the development of policies and programs that promote inclusive development, addressing the needs and experiences of diverse individuals and groups (Elson. D, 2020). Various gender aspects explain causes, trends extent and impact differently. Gendered perceptions have implications on the results of the study. Figure 2 below shows the distribution of the sample according to gender.

Distribution of the sample according to gender(n=79).

Figure 2. Source: Primary Data



The sampled respondents comprised a total of 47 males and 32 females representing 59.5% and 40.5 % respectively of the 79 respondents in the sample. In Figure 2 above, the participation of women in the study provided useful insights into the phenomenon under study. The distribution according to gender is synonymous with the male to female employment ratio in the banking industry in Zimbabwe.

4.3.2 Analysis of age distribution

The age distribution of respondents is an important consideration in any quantitative research. Scholars emphasize the importance of appropriate age categorization, as different categories can yield distinct results (Kessler,2020). Respondents were grouped into age group categories and Figure 3 below shows the age distribution of respondents used in the study.

Distribution of the sample according to age (n=79).

Figure 3. Source: Primary Data.

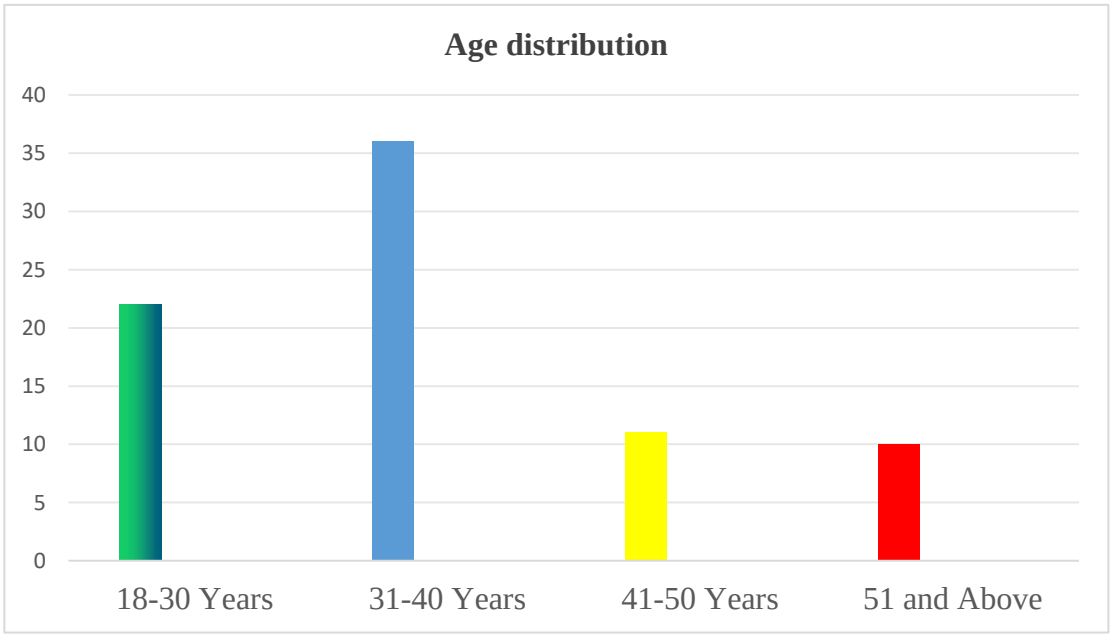


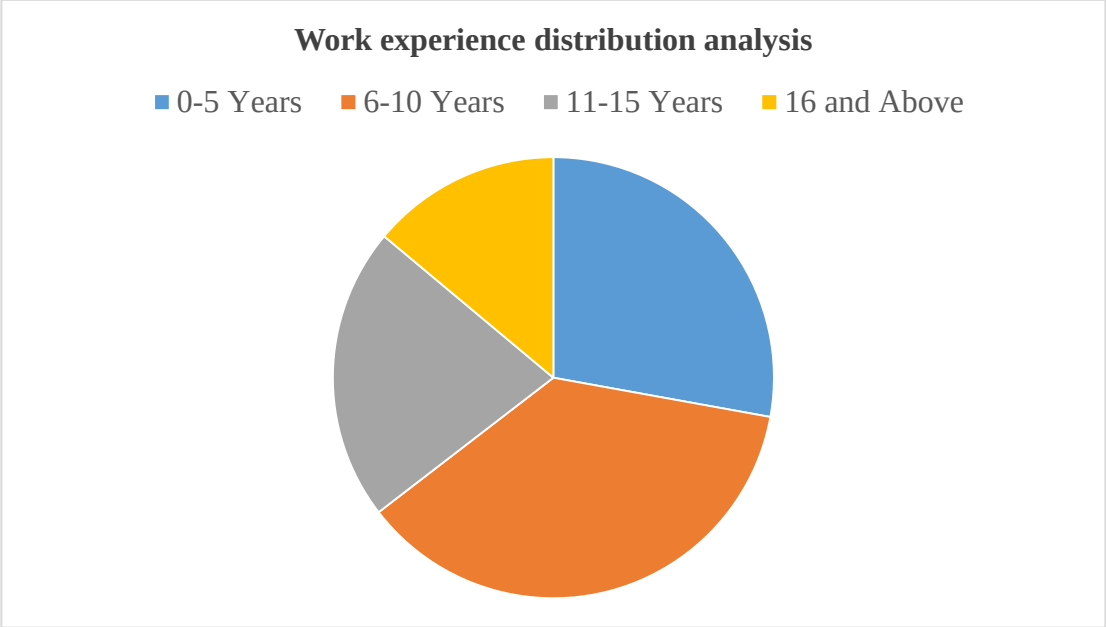
Figure 3 above shows the quantitative statistical distribution of respondents' ages. Only 22 respondents were between the age of 18-30 years, 36 respondents were between the ages of 31- 40 years, 11 respondents were aged between 41-50 years and 10 were above the age of 51 years. The sample shows representation of respondents in all age groups in all age group categories. The distribution allowed the researcher to obtain views from across respective age groups. Most of the respondents, comprising 45.5% of the sample were aged between 31 to 45 years while the least age group comprising 12.6 % was aged above 51 years. There is an indication that respondents comprised more of mature people. According to Elder (2020), mature respondents have accumulated life experience, which can provide valuable insights into various research topics.

4.3.3 Analysis of the distribution of respondents' experience at Central Bank

Respondents' distribution according to the work experience at Reserve Bank of Zimbabwe was also analysed. Work experience is an indispensable facet of the sample which should be analyzed.According to Wolff and Moser (2020),researchers should design interventions that take into account the work experience of participants, proving tailored support and resources to enhance career development and productivity and Figure 4 here below shows the distribution of respondents' length of service and experience at Central Bank of Zimbabwe.

Distribution of sample according to length of service or experience (n=79).

Figure 4. Source: Primary Data



Researchers should use appropriate measures and analytical techniques to capture the complexities of work experience and its impact on outcomes (Eby et al., 2020). Figure 4 above shows that most respondents in the sample had experience with more than 5years and the greatest number of respondents is in the category of 6 to 10 years. The sample is therefore laden with respondents with vast experience in banking industry. In terms of percentiles distribution, 27.85 % were within 5 years' experience, 36.71 % had experience ranging between 6- 10 years, 21.52 % had experience between 11-15 years and 13.92% of the sample accounted for respondents with over 15 years of work experience.

4.3.4 Analysis of respondents by standards of education

An evaluation of the respondents was done to critically assess the accuracy and reliability of responses. Researchers should consider the educational standards of respondents when sampling and recruiting participants, ensuring that the sample is

representative of the population, (Kagan 2020). Table 2.5 below shows the distribution of the sample according to highest standards of education attained.

Distribution of sample according to standards of education; n=79.

Table 2.5. Source: Primary Data

Highest Standard	Respondents	Percentage%
O Level	3	3.7%
A level	4	5.1%
Diploma	12	15.2%
Degree	44	55.7%
Master's degree plus	16	20.3%
TOTALS	79	100%

Table 2.5 above shows that all the respondents in the sample had a minimum of Ordinal level as basic education. A total of 91.1% of the respondents in the sample had highest level of qualification above diploma. The researcher thus assured that respondents understood the aims and objectives of the study. The distribution of the levels of education among respondents gives an insight into the calibre of respondents as well as quality and accuracy of data findings in the study.

4.4 Understanding on vehicle tracking systems

To provide an understanding on vehicle tracking systems, section B of the questionnaire tested the respondents on their knowledge on the concept of vehicle tracking systems.

A mix of structured and semi structured questions were used. Respondents who were not part of the questionnaire were asked the same questions during interview sessions.

4.4.1 What is your understanding on vehicle tracking systems.

Respondents in the questionnaire provided a variety of answers with some respondents suggesting more than one possible answer. In their understanding of vehicle tracking system, respondents gave the following definitions linking to the importance of vehicle tracking system as shown in Table 2.6 below. Descriptive Statistics of Respondents' understanding of Vehicle Tracking Systems.

Table 2.6 Source: Primary Data

Definition	Remarks
1. Devices used to prevent fuel theft and misuse of company vehicles.	10 respondents have their definition much related to this one.
2. Electronic gadgets used to prevent personal use of company vehicles.	25 respondents aligned their definition to this one
3. System meant to monitor drivers against dangerous driving that will tarnish company image.	14 respondents showed their understanding close to this one
4. Technology that reduces chances of diverting routes by drivers.	8 respondents showed similar understanding on this one.
5. A loss control measure that reduces repairs and maintenance costs caused by mal practices by company vehicle drivers.	17 respondents reflected their common knowledge equated to this one.
6. Not sure	5 respondents were not sure about what vehicle tracking is out of 79 participants.

Out of the respondents in the questionnaire sample, 74 respondents attempted to define vehicle tracking system providing a positive response rate of 93.7% and a negative response rate bias rate of 6.3 % came from 5 respondents who indicated that they lacked understanding on the subject matter. The responses given by the respondents as shown in Table 2.6 shows that there is no common understanding of vehicle tracking systems among respondents. When respondents were interviewed about their understanding on vehicle tracking system, respondents evidently had sufficient knowledge about tracking of company vehicle technology as shown by 93.7% of participants who provided good and basic knowledge on the subject. Majority of respondent interviewed confirmed their basic ideas on vehicle tracking system according to their exposures and experiences. This means vehicle tracking systems does not have a single known meaning.

4.4.2 Descriptive statistics on purpose of company vehicles tracking systems

Respondents were given opportunity to indicate on a 5 level Likert scale the extent to which they agree or disagree to specific elements on the purposes of vehicle tracking systems. The respondents gave the following feedback**:**

Descriptive statistics on defining vehicle tracking systems.

Key: Strongly Agree=SA; Agree= A; Neutral= N; Strongly Disagree=SD

Table 2.7 Source: Primary Data

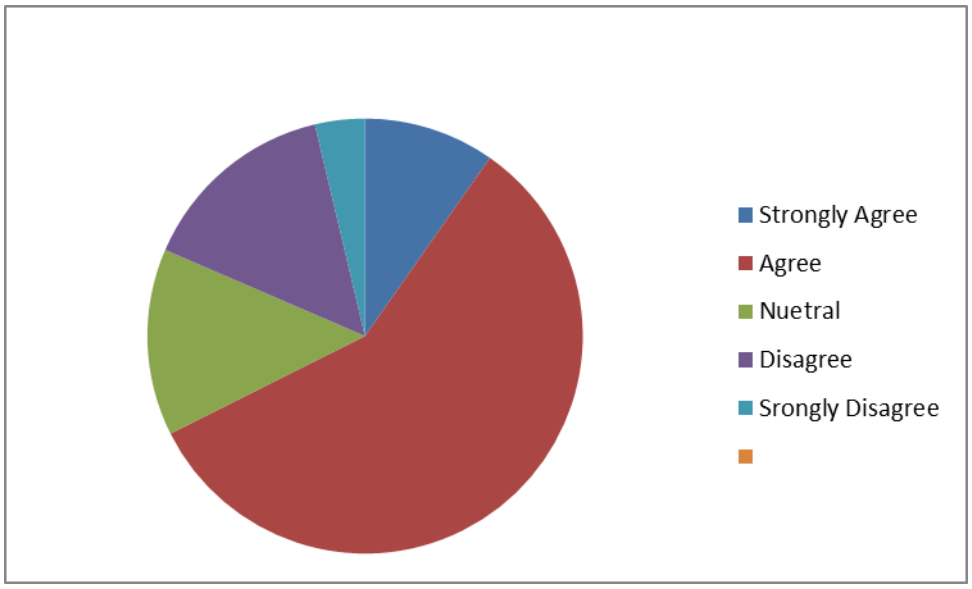
Purposes of vehicle tracking systems	SA	A	N	D	SD
To prevent theft and misuse of fuel	33.3%	37%	18.5%	5.6%	5.6%
To reduce route diversion by drivers	11.1%	75.9%	9.3%	3.7%	-
To reduce reputational damage and dangerous driving	14.8%	56.6%	18.5%	11.1%	-
To prevent personal use of company vehicles	7.4%	64.8%	9.3%	11.1%	7.4%
To reduce inefficiencies and unnecessary expenses through repairs and maintenance.	39.0%	51.6%	7.4%	2.0%	-

While respondents had been given hints on the purposes of vehicle trackers, the above descriptive statistics indicates that most respondents either strongly agreed or agreed to the essential purposes of company vehicle tracking systems. Where respondents were not sure, they opted to remain neutral. The statistics clearly depicted that respondents

support the purposes of company vehicle trackers as hinted. To develop an overall overview picture of the extent to which respondents agreed or disagreed with the elements of purposes of vehicle tracking systems given by the scholars, the researcher summed up the findings in Table 2.7 and Figure 5 here below shows the average overall rate of agreement to the uses of vehicle tracking systems.

Overall rate of agreement on the purposes of Company vehicle tracking system

Figure 5. Source: Primary data



In Figure 5 above it is apparent that most respondents strongly agree (9.7%) or agree (57.9%) to the scholarly terms used to outline the purposes of company vehicle tracking systems. Respondents who remained neutral accounts for 13.9%. Respondents who disagreed account for 14.8% while those who strongly disagreed account for 3, 7% of the total respondents in the study.

4.4.3 Descriptive Statistics on knowledge on the methods of vehicle tracking systems.

To find out the vehicle tracking systems that are known by participants, a test on a list of vehicle trackers were done through a Likert scale with participants indicating whether they are aware of such gadgets or not in as far as vehicle tracking is concerned. From the list was Global Positioning System (GPS), Geographical Information System (GIS), Internet of Things (IoT) asset tracking, On-board diagnostics (OBD) tracker and Radio Frequency Identification (RFID) tracker. The respondents showed their knowledge on those technological gadgets used the tracking of vehicles and is summarized by Table 1.8 below. The researcher asked respondents to rate the extent to which they agreed or disagreed on knowing types of vehicles tracking from the list given by the researcher. The following is the distribution of the responses in form of a Likert Scale.

Descriptive statistics on knowledge on method of vehicle tracking systems.

Key: Strongly Agree=SA; Agree=A; Neutral=N; Disagree=D; Strongly Disagree=SD

Table 2.8 Source: Primary Data

Method of Vehicle tracking systems	SA	A	N	D	SD
Global Positioning System (GPS)	64.6%	11.4%	8.8%	7.6%	7.6%
Geographical Information System (GIS)	27.8%	32.9%	30.4%	8.9%	-
Internet of Things (IoT) asset tracking	55.7%	17.7%	13.9%	12.7%	-
0n-board diagnostics (OBD) tracker	6.3%	32.9%	25.3%	21.5%	13.9%
Radio Frequency Identification (RFID) tracker	3.8%	29.1%	39.3%	3.8%	24%

The distribution is analysed and discussed below.

The statistical data gathered suggested that Global Positioning System is well known with 51 and 9 participants representing 64.6% and 11.4% strongly agreed and agreed respectively to have knowing it with 24.1% or 19 participants representing those who remained neutral, disagreed and strongly disagreed to have knowledge on the function of GPS. 60.7% of respondents that is 48 of them showed that they strongly agreed and agreed to have knowledge that GIS is used in the vehicle tracking systems with 38.9% or 31 remained neutral and disagreed to have knowing the used of GIS. The majority of participants representing 73.4% of the participants that is 58 out of 79 strongly agreed and agreed to have knowledge on Internet of Things asset tracking in vehicle tracking systems while 21 respondents constituting 26.6% remained neutral and disagreed. On-board diagnostics (OBD) trackers, majority of participants of 60.8% or 48 of them remained neutral, disagreed and strongly disagreed to have knowledge on the use of this technological gadget while 31 participants representing 39.2% strongly agreed and agreed to have knowing the On-board diagnostics trackers. On the same token, most participants that is 53 representing 67.1% also showed that they remained neutral,

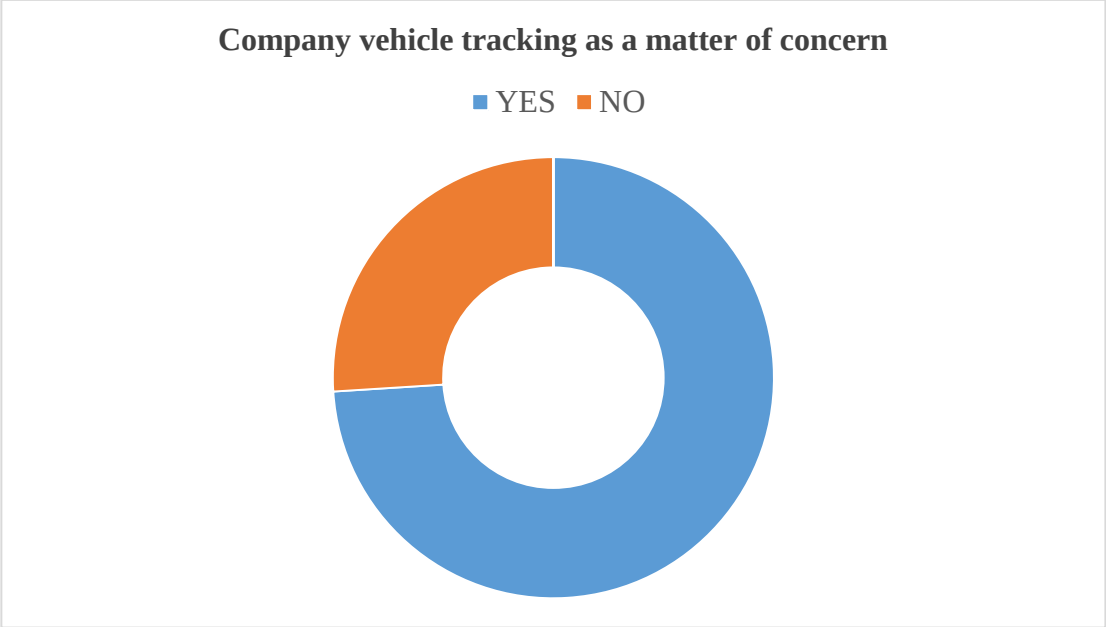
disagreed and strongly disagreed to have knowledge on the use of RFID tracker while 32.9% or 26 respondents indicated that they strongly agreed and agreed to be knowing this method of tracking system. Therefore, to this end, GPS, GIS and IoT trackers proved to be quite known by participants in this research study, yet most respondents indicated that they are not conversant to OBD and RFID trackers.

4.4.4 Analysis on considering company vehicle tracking system as a matter of concern

Respondents were asked if they consider installation of trackers on company vehicle as a matter of concern in business operations through the questionnaire and interview sessions. The statistics gathered was presented in form of Figure 7 below. The participants had their responses in form of a YES /NO.

Descriptive analysis on considering company vehicle tracking as a matter of concern (n=79).

Figure 6. Source: Primary data



From gathered statistics in Figure 6 above, 58 participants representing 73.4% indicated that installation of trackers on company vehicles is a matter of concern in enhancing economic use of vehicle in the mantra of loss control and management while 26.6% that is 21 respondents considered it otherwise. Hence, this convinced the researcher that vehicle tracking systems are very crucial in mitigating misuse of company vehicles.

4.5 Understanding forms of company vehicle misuse

This section serves to explore the extent to which respondents understand and know forms of company vehicle misuse according to their work experience. This descriptive statistical analysis was done from the questionnaire where respondents give various forms where company vehicles can be misused as a structured question and also through a Likert Scale. Participants had a chance to appreciate how far do they agree on ways of company vehicle misuse in Zimbabwe banking industry to be specific by ticking in the appropriate boxes provided. Table 2.9 below then shows consolidated response from participants in percentile form on appreciating forms of company vehicle misuse.

Descriptive Analysis on understanding Forms of company vehicle misuse (n=79).

Key: Strongly Agree=SA 2. Agree=A 3. Neutral=N 4. Disagree=DA 5. Strongly Agree=SD

Table 2.9 Source: Primary data

Ways of company vehicle misuse	SA	A	N	D	SD
Fuel theft	40.5%	50.6%	8.9%	-	-
Route diversion	49.4%	50.6%	-	-	-
Picking unauthorized passengers	63.3%	25.3%	11.4%	-	-
Reckless driving	26.6%	34.2%	19.1%	11.4%	8.7%
Excessive idling	12.7%	17.7%	25.3%	38%	6.3%
Carrying personal equipments	39.2%	45.6%	15.2%	-	-
Joyriding	-	10.1%	25.3%	11.4%	53.2%

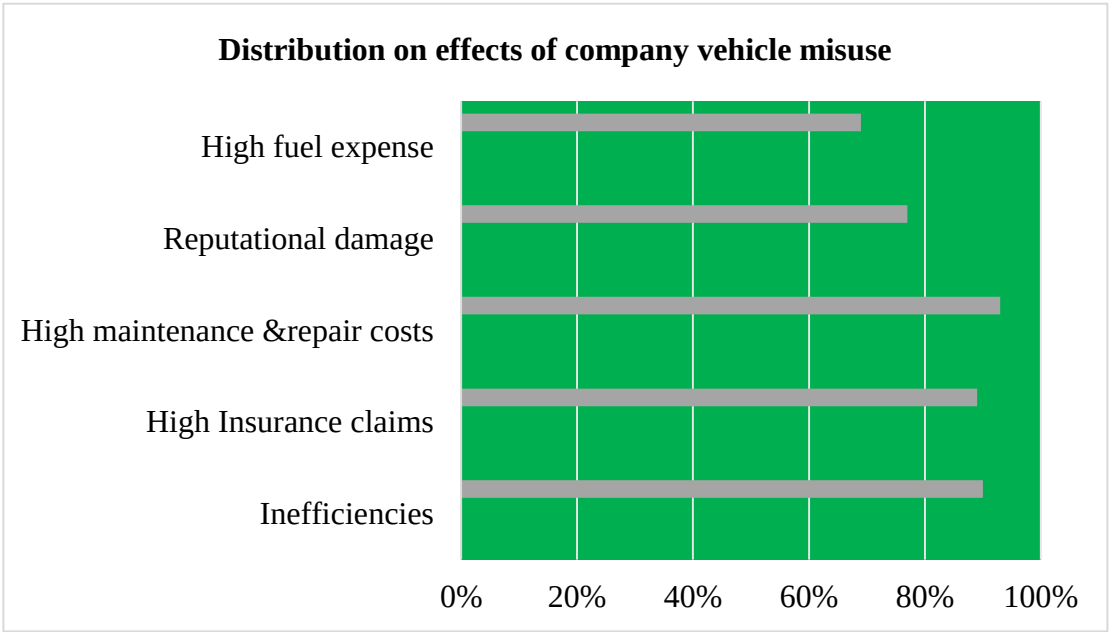
The distribution is analysed and discussed below.

The table 2.9 above shows that 32 respondents strongly agreed and 40 agreed to have understanding on fuel theft as one of the forms of company vehicle misuse constituting of 40.5% and 50.6% respectively of the total participants. This shows that the majority of participants that is 91.1% revealed that they understand fuel theft as one company vehicle misuse. The remaining 8.9% that is 7 respondents remained neutral on their comments in appreciating fuel theft as a form of company vehicle misuse. All the respondents understood route diversion as another company vehicle through strongly agreed and agreed whilst 88.6% viewed picked unauthorized passengers as another form of company vehicle misuse with 11.4% remained neutral. From data gathered

60.8% of participants revealed that they understand reckless driving as part of company vehicle misuse whilst 39.1% remained neutral, disagreed and strongly disagreed. 24 respondents that is 30.4% indicated that they strongly agreed and agreed that excessive idling is another form of company vehicle misuse yet 25.3%, 38% and 6.3% remained neutral, disagreed and strongly disagreed respectively to it. Carrying personal implements was considered by 84.8% as one of the company vehicle misuses whilst 15.2% remain neutral on that. Only 8 respondents agreed joyriding as another form of company vehicle misuse that is 10.1% of total participants while 25.3%, 11.4% and 53.2% remained neutral, disagreed and strongly disagreed respectively to joyriding as a form of company vehicle misuse. To this end, all the forms of vehicle misuse were considered positive by the majority yet excessive idling and joyriding were understood otherwise.

Descriptive analysis on the effects of company vehicle misuse.

Figure 7. Source: Primary data



From the participants 69% ,77% and 93% indicated that they considered high fuel expense, reputational damage and high maintenance costs respectively whilst 89% and 90% of respondents suggested that high insurance claims and inefficiencies respectively are the effects of company vehicle misuse. Therefore, it entails that respondents agreed that they understand all those five effects of company vehicle misuse as relevant as shown by the Figure 7 above.

4.6 Effectiveness of vehicle tracking systems on company vehicle misuse

This section seeks to find out whether the vehicle trackers are effective in managing company vehicle misuse and inefficiencies. Responses from the questionnaire and interviews led the researcher to have findings and conclusion pertaining effectiveness of these technological gadgets. It interrogates participants on whether there is a relationship between vehicle trackers and company vehicle misuse before asking why there is still misuse of company vehicles despite trackers being installed. On top, there were recommendations given by respondents to increase effectiveness of vehicle tracking systems in curbing company vehicle misuses and inefficiencies

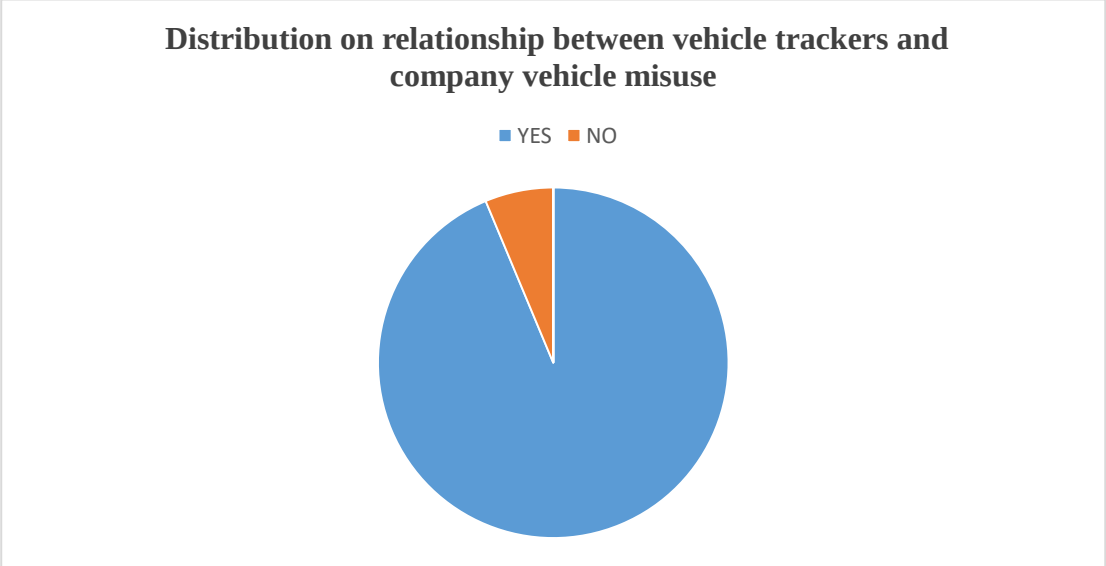
4.6.1 Analysis on the relationship between vehicle tracking system and company vehicle misuse.

Figure 8 below shows the distribution analysis on the participants responding on whether there is a relationship between vehicle tracking systems and company vehicle

misuse. A yes/no question was asked to the respondents, and analysis is displayed in Figure 8 below.

Distribution on relationship between vehicle trackers and company vehicle misuse (n=79).

Figure 8. Source: Primary data



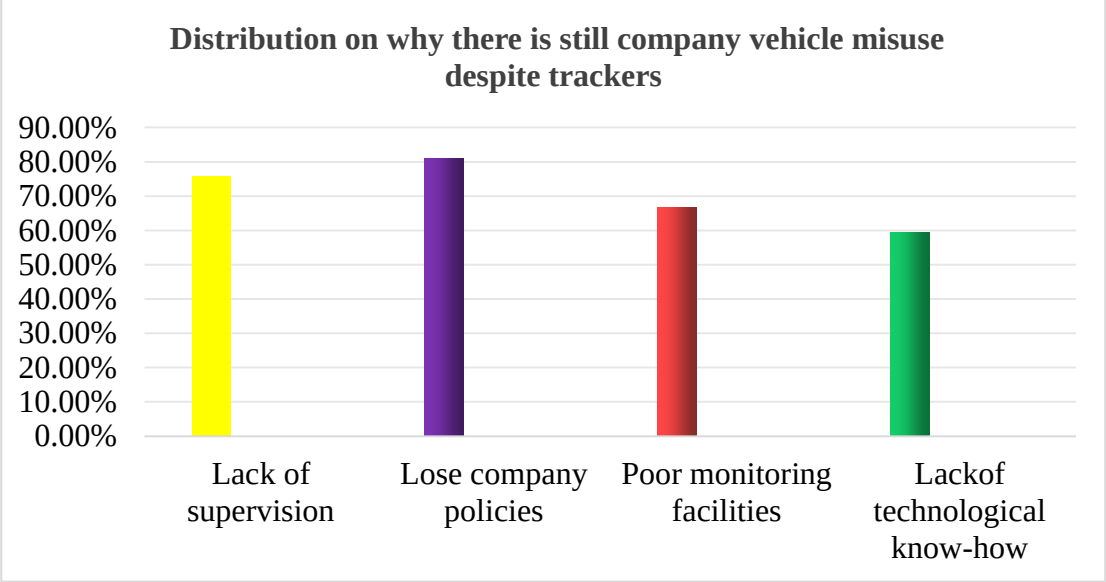
From the chart above, 74 respondents that is 93.7% indicated that there is an inverse relationship between the two variables meaning to say if company vehicles are installed with trackers, there reduction in the chances of company vehicle misuse and inefficiencies. However, 6 participants constituting 6.3% suggested that there is no relationship between vehicle trackers and company vehicle misuses and inefficiencies.

4.6.2 Distribution on the reasons why still company vehicle misuse despite trackers installed.

It has been often witnessed that even though company vehicles are fixed with various forms of tracking systems, company vehicle misuses could not be completely curbed. Therefore, the researcher interrogated participants on the causes of why company vehicle misuse despite employing trackers. Figure 9 below illustrated a distribution analysis on the reasons. Reasons cited were lack of supervision, lose company policies, poor monitoring facilities and lack of technological know-how by supervisors or management.

Distribution on why there is still company vehicle misuse despite trackers(n=79).

Figure 9. Source: Primary data



The distribution shown on figure 9 indicated that despite having vehicle trackers installed on company vehicles, there are also reason why misuse is failing to be curbed. 60 respondents constituting 75.9% pointing out that even trackers are installed, company vehicles are still being misused due to lack of supervision. Lose company

policies was indicated as one of the reasons why misuse of company vehicles still witnessed despite installation of trackers supported by 64 participants that is 81.01%. More so, 69.62% of respondents that is 55 pointed out that poor monitoring devices by companies to monitor those trackers is another reason why still company vehicles are still be misused. Lack of technological know-how was supported by 47 respondents representing 59.5% as another cause why company vehicles misuse is still being done despite employing trackers. Therefore, lack of supervision, lose company policies, poor monitoring devices and lack of technological know-how were chief reasons why trackers are failing to totally curb company vehicle misuse.

4.7 Summary

This chapter dealt with data presentation, analysis and interpretation in accordance with the objectives of the study. The chapter provided an analysis of responses given to research instruments used namely the questionnaire and interviews. The main research question was answered by breaking it down into various sub questions and sub questions. Quantitative information gathered by the questionnaire was presented through graphs, tables and charts. Qualitative information acquired through interviews was presented through discussion. The next chapter will present the findings of the study, conclusions reached and recommendations.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The previous chapter presented both quantitative and qualitative data gathered in this study. Data presented was also analysed and discussed considering the objectives of the study. Analysis and discussion were also supported by empirical evidence and relevant literature. The underlying chapter seals the study by giving a summary, conclusion and recommendations.

5.2 Study objectives revisited

The study 'Investigating effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe'. A Case study of Reserve Bank of Zimbabwe Transport Department both Harare and Bulawayo branches (2020-2025). The study specifically sought to:

1. Explain what vehicle tracking systems is and its types.

2. Identify the forms of company vehicle misuse that causes losses and inefficiencies.

3. Evaluate the effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe

4.Propose recommendations and possible solutions to mitigate company vehicle misuse and inefficiencies even though vehicle tracking systems are in use in Zimbabwe.

5.3 Summary of Findings

The following are the major findings and conclusions of the study:

5.3.1 What are the types of vehicles tracking systems?

There are similar definitions and explanations cited by different scholars in this research study:

Singh et al., (2020), a vehicle tracking system (VTS) is a technological solution that utilizes GPS, GSM, and IoT technologies to track and monitor vehicles in real time. Vehicle tracking system is a system that uses GPS and cellular networks to track the location, speed, and direction of vehicles, (Kumar et al., 2019).

According to Verma et al., (2020), Vehicle tracking system is an intelligent system that integrates GPS, GIS, and IoT technologies to provide real-time information on vehicle location, status and route history.

Types of vehicles tracking systems were summarized as:

There are Cellular- Based Tracking Systems, according to Al-Fuquaha et al., (2020) which are systems that utilize cellular networks to transmit tracked, making them cost-effective and suitable for urban areas with robust network coverage.

Another type of vehicle tracking system is Satellite-Based Tracking Systems. According to Rao et al., (2020), these systems offer unparalleled global coverage, reaching remote and rural areas where cellular networks may not exist.

There is another type called Hybrid-Tracking Systems. Kim et al., posited that Hybrid Tracking Systems are the systems that combine the strength of cellular and satellite technologies, ensuring robust coverage across diverse environments.

The automated fleet management systems that constantly track the location of objects or events are known as real-time location (Rathnayaka et al.,2021). When compared to the traditional single mode of GPRS, the embedded GPS real-time monitoring and alerting system makes up the disadvantage of the large time delay and the uncertainty of the time delay in data transmission (Ebinowen and Umaru, 2020).

Mobile communication, GPS, GIS, RFID, and embedded real-time system design and implementation technologies that support real-time organizational requirements for real-time visibility on transportation, which is subsequent of the fleet management visibility, according to Wycislak (2020). The most advanced technologies use satellite tags for continuous real-time tracking.

Since every business is different, fleet managers are looking for a different solution to difficulties and new ways to optimize business. One way to get the most out of business is to implement GPS tracking (TitanGPS, 2020). Kaskatiiski (2020) defined the telematic system as a component or device used for collecting data. Utilizing telematics-based devices enables efficient fleet management, according to Chaba (2021). Chaba (2021) also stated that speed, position, and fuel consumption level are regularly acquired information in the utilization telematics systems, while information about the driver forceful braking and speeding. Telematics are technical tools that monitor factors

related to driving and driving behaviour employed by the driver operator, providing crucial information for risk assessment (Chaba 2021)

5.3.2 Forms of company vehicle misuse that causes inefficiencies

The study came up to realize the following as forms of company vehicle misuse; fuel theft, route diversion, picking unauthorized passengers, reckless driving, carrying personal implements even though excessive idling and joyriding were supported by minority of the participants.

5.3.3 Effectiveness of trackers on company vehicle misuse

The vehicle tracking systems serves to bring the following advantages: to prevent fuel theft and misuse of fuel, to reduce route diversion, to reduce reputational damage through dangerous driving, to prevent personal use of company vehicles, to reduce inefficiencies and unnecessary expenses through repairs and maintenance as well as to reduce insurance claims.

5.3.4 Reasons why company vehicle misuse despite installation of trackers

The study come up with the following reasons why companies still experience vehicle misuse and inefficiencies despite installation of trackers: lack of supervision and monitoring, lose company policies, poor monitoring facilities and lack of technological know-how by management.

5.4 Conclusion

The study ‘Investigating effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe’ concluded that even though trackers are very effective, technical and administrative controls particularly from management side to compliment monitoring is lacking because it has been proved that company vehicles are still being misused despite employing trackers.

5.5 Recommendations

Considering the above findings and conclusions, the study recommends that on top of having company vehicle tracking systems in curbing misuse and inefficiencies, administrative and management controls should be in place and these are adequate supervision, strong company policies, adequate monitoring facilities and technological know-how by management.

5.6 Recommendations for future study

The research study was confined to Reserve Bank of Zimbabwe both Harare and Bulawayo branches. Therefore, the researcher recommends future studies to be stretched to Government Ministries like Zimbabwe Republic Police where emergency in policing is at stake for example during scene attendance such as accidents and robberies where emergency police reaction is called up mostly to serve life and property. This will promote good service delivery, public trust and public confidence.

REFERENCES

Al-Fuquaha et al., (2020). Internet of Things: A Survey of Enabling Technologies, Protocols and Applications. *Journal-IEE Communication Surveys &Tutorial*s, Vol.17, No.4.

Anon (2022). Non-probability sampling: Definition, types, examples, and advantages. *Question pro.* Available*:* *https://www.questionpro.com/blog/non-probability-sampling/* (Accessed 31 August 2022).

Aries, K. (2020). Why Monitor Harsh Braking and Acceleration?

Ahmed.M (2020). An Investigation into the Impact of GPS Tracking on Company Vehicle Misuse in Australia.

Al-Sultan, Al-Bayatti and Zedan (2020), Vehicle tracking system using GPS and GSM. *Journal of engineering Science and Technology.*

Barnett and Duvall (2020). Power in global governance, Cambridge University Press, England.

Beauchamp and Childress (2019). *Principles of biomedical ethics.*

Bnouachir, H., Chergui, M., Machkour, N., Zegrari, M., Chakir, A., Deshayes, L. and Medromi, H. (2020). Intelligent Fleet Management System for Open Pit Mine. *International Journal of Advanced Computer Science and Applications11(5).* Available: https://www.researchgate.net/publication/341870856 (Accessed: 09 June 2022).

Boshell, P. (2019). The Power of Place: Geolocation Tracking and Privacy.

Bryman, A. (2019) Social research methods, Oxford University Press, UK.

Cameron and Quinn (2020). Diagnosing and changing organizational culture: *Based on the competing values framework*, Jossey-Bass, United States.

City of New York Department of Investigation Report on Systematic Misuse of City-Owned.Vehicles by Department of Correction Executive Staff (2017)

Chaba, R. (2021). Influence of telematics of ubi insurance on the management of the fleet of company vehicles. International Journal of Advanced Computer Science Applications 92(2) Available: https://doi.org/1014669/AM.VOL92.ART5.

Chidyausiku (2019). Enhancing Fleet Management.

Chiparo, J.P., Tukuta, M., and Musanzikwa (2022). Vehicle fleet management practices and service delivery in State-Owned Enterprises in Zimbabwe, 12 159-171.

Chronicle (2019), Zim papers, Harare.

Coyle, Langley and Novack (2020). Supply chain management: *A logistics perspective*, Cengage Learning.

Creswell and Creswell (2020). Research design: *Qualitative, quantitative, and mixed methods approaches*, Sage Publications, USA.

Daft, Murphy and Willmott (2020). Organization theory and design, Cengage Learning, United Kingdom.6/s12874-022-01531-6.

Davern, M., and McAlister, A. (2020). "Nonresponse bias in health survey: A Systematic review". "BMC Medical Research Methodology, 22(1), 1-13.doi:10.11.

Davis et al., (2020). Stewardship Theory and Company Vehicle Misuse, *Journal*-Academy of Management Review, Vol.22, No.1.

Deloitte Africa (2020). Africa Motor Vehicle Survey, Johannesburg.

Deloitte Southern Africa (2022). Southern Africa Automotive Survey, Johannesburg.

Deloitte Zimbabwe (2020). Zimbabwe Automotive Survey, Harare.

Denzin, N.K. (2020) The SAGE Handbook of Qualitative Research, SAGE Publications, USA.

Devasani, N. (2020) Latest Developments in GPS tracking solutions for Road Transport. Security and Fleet Managers in India.

De Sounza, F., Gurumurthy, K., Auld, J. and Kockelman, K. (2020). An Option- Based Strategy for Shared Autonomous Vehicle Fleet Repositioning. Proceedings *of the 6th International Conference on Vehicle Technology and Intelligent Transport Systems*, Prague, 2-4 May 2020.7p.

Ebinowen T.D. and Umaru, W. (2020). Fleet Tracking and Monitoring System in Production Industries. *American Journal of Engineering Research*,9(7) Available: https://www.ajer.org/studys/Vol-9issue7/A09070108.pdf(Accessed 06 July 2022).

Eby, L.T., Butts, M.M., and Lockwood, A. (2020). Protean careers and work experience: A review and future directions. J*ournal of Vocational Behavior,119,103442.*

Elder, J. (2020). The Economics of aging. *Journal of Economic Literature*, 58(3),531-562.

Elson, D. (2020). Gender and Macroeconomics: *A Review of the Literature Feminist Economics, 26(2),1-24.*

Ernst and Young (2020). *Global Fleet Safety and Risk Management Survey.*

Flower, L. (2019). Driver management system: 4 *solutions to manage drivers and safety*. Available: https://www.fleetio.com/blog/driver -management-system-4-solutions-to-manage-drivers-andsafety (Accessed: 14 July 2022).

Fleming (2020). Vehicle tracking systems: A review of the literature. International *Journal of Transportation Science.*

Harrington and Esseling (2020). *Business processes improvement*, McGraw-Hill, New York.

Harcourt and Osuigbo (2023). Vehicle Tracking and Sustainable Competitive Advantage of oil and gas Companies in River State, Nigeria. Nigerian *Journal of Management Sciences vol.24 issue 2a August 2023.*

Haugaard (2019), Power and legitimacy, Routledge, UK.

Herald (2020) Zim papers, Harare.

Hernandez et al., (2019). *Stewardship Culture and Vehicle Maintenance.*

Hrebiniak (2019), Making Strategy work: Leading effective execution and change, Wharton School Publishing, Philadelphia.

International Journal of Transportation Science (2019). *Vehicle Misuse in the Workplace.*

Jain et al., (2018). Vehicle Tracking Systems Using GPS and Cellular Networks.

Journal of Transportation Management (2020). T*he Impact of Vehicle Misuse on Fleet Management.*

Journal of Transportation Management in Zimbabwe (2019). *Vehicle Tracking Systems in Zimbabwe.*

Journal of Transportation Management in Africa (2022). *Vehicle Misuse in African Fleets.*

Journal of Transportation Management in Southern Africa (2022). Vehicle Tracking Systems in Southern African Fleets.

Kagan, J. (2020). The role of education in human development. *Journal of Applied Development Psychology, 66, 102924.*

Kaskatiiki. N (2020). Size and speed of data generated by Fleet Management Software.*International Scientific Journal, 5 (1). Available*: https://stumehournals/tm2020/1/13.full.pdf.

Katz and Lazar (2020). Deviant behaviour in organizations, Sage Publication, USA.

Kebande, V.R., Karie, N.M.& Ikuesan, R.A. (2021). Real-time monitoring as a supplementary security component of vigilantism in modern network environments. *International journal of information technology*, 13(1). Available: https://doi.org/10.1007/s41870-020-00585-8 (Accessed: February 2021)

Kessler, R.C. (2020). Age and aging in the World Health Organization's International Classification of Diseases. *The Journal of Gerontology*: Series B,75(4), 537-545.

Kim et al., (2019). *Compensation and Stewardship Behaviour*, Harvard Publishers, USA.

Khatun, R., Antor, S., Ullah, A., & Hossain, A. (2019). Vehicle Fuel Activities Monitoring System Using IoT. *Advances in Internet of Things*, 9, 63-71. doi: 10.4236/ait. 2019.94005.

Kotter (2020). *Accelerate*: Building strategic agility for a faster-moving world Harvard Business Review Press, USA.

KPMG Africa (2020). Africa Fleet Management Survey.

KPMG Southern Africa (2020). Southern Africa Fleet Management Survey.

KPMG Zimbabwe (2020). Zimbabwe Fleet Management Survey.

Kreuter, F., and Peng, J. (2020). Non-response bias in Survey: A review of the Literature. Journal of Survey Statistics and Methodology, 8(1),1-25.

Kumar, Sigh and Kumar (2020), Vehicle tracking system using GPS and GSM, International *Journal of Advanced Research in Computer Science.*

Kumar et al., (2019). Vehicle Misuse in the Workplace.

Kumar (2018). Vehicle tracking systems for efficient fleet management: J*ournal of Intelligent Transportation Systems.*

Luck, R. (2019). "Design Research, Architectural Research, architectural design research: An argument on disciplinary and identity", *Design Studies.* Available: https://doi.org/10.10.1016/j.destud.2019.11.001.

McCombes, S.(2022). Sampling methods: Types, techniques & examples. Available: https://www.scribbr.com/methodology/sampling-methods/ Accessed 23 August 2022).

Monnerat, F., Dias, J., & Alves, M.J. (2019). Fleet management: A vehicle and driver assignment model. *European Journal of Operational Research,* 278(1). Available: https//doi.org/10.1016/j.ejor.2019.03.021(Accessed: 01 October 2019)

NewsDay (2019). Zim papers, Harare.

Olowu, T. (2019). The effects of GPS Tracking on Company Vehicle Misuse in Nigeria

Polit and Beck (2019). Essentials of Nursing Research.

Porter and Heppelmann (2019). How to measure the effectiveness of innovation, Harvard Business Review, UK.

PwC Africa (2022). Africa Automotive Survey.

PwC Southern Africa (2018). Southern Africa Automotive Survey.

PwC Zimbabwe (2020). Zimbabwe Motor Vehicle Survey.

Rao et al., (2019). Vehicle Tracking System.

Rathnayaka, R., Ekanayake, K., Rathnayake, H., and Jayetileke, H.2021. Fleet management with real-time data analysis.2021 6th International Conference on InformationTechnologyResearchAvailable: https//doi10.1109/icitr54349.2021.9657406.

Resnik (2019). What is ethics in research and why is it important?

Sataloff, R., T and Vontela, S. (2021). Response Rates in Survey Research. *Journal of Voice35(5) DOI: 1016/j.voice.2020.12.043.*

Saunders, N.K., Lewis, P and Thornhill, A. (2019). Research Methods for Business Students, 8th Edn. London: Pearson Education.

Sharma, M.M. (2020). A study on the concept of green supply chain management. *Journal of Supply Chain Management Systems* 2(1):1-7.

Sileyew, K. (2019). Research Design and Methodology. In E. Abu- Taieh, A.E Mouatasim, and I.H.A. Hadid(Eds.), Cyberspace. Intech Open. https://doi.org/1010.5772/intechopen.85731.

Singh, S & Singh A. (2020). Design and evaluation of a real-time fleet management system. *International Journal of Technical Research and Applications*.2(3):95-99.

Southern African Journal of Business Management (2020). Ethics of Vehicle Tracking System.

South African Journal of Business Management (2019). Vehicle Misuse in South African Companies, South Africa.

TitanGPS. 2020. Definitive Guide to Better Fleet Monitoring.https//titangps.com/blog/definitiveguide-tobetter-fleet-monitoring/(Accessed 17 January 2022).

Wallin, M. (2020). Fleet Management and the Role of the Fleet Manager.

Wolff, H.G., and Moser, K. (2020). Entrepreneurial experience and career success: A Systematic review and meta-analysis. *Journal of Business Venturing,35(4),105924.*

Yin (2020). *Case study research and applications: Design and methods,* Sage Publications, USA.

ZICA (2020). Vehicle misuse in Zambian Companies

APPENDIX 1: QUESTIONNAIRE for Reserve Bank of Zimbabwe Harare and Bulawayo Branches Employees.

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF INTELLIGENCE AND SECURITY STUDIES

Dear Sir/ Madam

I am Mhazha Martin, a student at Bindura University of Science Education (BUSE), doing research in fulfilment of my bachelor's degree in Police and Security Studies. The research is titled "**Investigating effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe. A case of Reserve Bank of Zimbabwe Transport Department.** The following questionnaire was designed to answer four research objectives:

- To identify types of vehicles tracking systems used in Zimbabwe.
- To document the forms of company vehicle misuse that causes losses and inefficiencies.

- To evaluate the effectiveness of vehicle tracking systems in curbing company vehicle misuse and inefficiencies in Zimbabwe.
- To recommend strategies to mitigate company vehicle misuse and inefficiencies even though vehicle tracking systems are in use in Zimbabwe.

Please be informed that your responses to this questionnaire will be used strictly for academic purposes and will be treated as highly confidential as possible. Your honest and accurate cooperation will be greatly appreciated.

Instructions to participant

Please answer the questions in truth

Do not write your name on the questionnaire.

Thank you for your cooperation.

Yours Sincerely,

Mhazha Martin

SECTION A: Respondent's demographics (Please Tick to indicate your response where possible)

1. What is your Sex? Female [ ] Male [ ]

2. Indicate your age group

   a. 18-30 years [ ] b. 31-40 years [ ] c. 41-50 years [ ]

d. 51 years and above [ ]

3. What is your highest level of education?

a. Ordinary level [ ] b. Advanced level [ ] c. Diploma level [ ]

d. Degree [ ] e. Master's degree plus [ ]

4. For how long have you been at the Central Bank?

a.0-5 years [ ] b. 6-10 years [ ] c.11-15 years [ ]

d. 16 and above [ ]

5. What Division or Department are you attached to?

a. Economics [ ] b. Human Resources [ ] c. Group security&Loss control [ ] c. Technical [ ]d. Exchange Control [ ] e. Bank Supervision [ ] f. Financial Markets [ ] g. Audit [ ]

h. Finance [ ] i. FIU [ ] j. IT [ ]

Section B Understanding Vehicle Tracking Systems

6. Have you ever heard of vehicle tracking systems?

Yes [ ] No [ ]

7. What is your understanding on vehicle tracking systems ……

……...

8. What are the purposes of having company vehicles fixed with trackers?.....

.....

.....

9. The purpose of this section is to give an opportunity to indicate on a 5 level Likert Scale the extent to which you agree or disagree to specific elements used to understand purposes of vehicle tracking systems. The scale that ranges from “Strongly Agree” to “Strongly Disagree”.

Key1.Strongly Agree=SA 2. Agree=A 3. Neutral =N 4. Disagree=D 5. Strongly Disagree=SD

Indicate appropriately and tick

Purpose of Vehicle Tracking Systems	SA	A	N	D	SD
To prevent theft and misuse of fuel.					
To reduce route diversion by drivers.					
To prevent reputational damage and dangerous driving					
To prevent personal use of company vehicles.					
To reduce inefficiencies and unnecessary expenses through repairs and maintenance					

10.If you disagree with any of the above purposes, please provide reasons……

……

……

11. The purpose of this section is to give you a chance to rate from your experiences and knowledge the extent to which you agree or disagree with various methods of well-known vehicle tracking systems. For each item, please indicate using a 5-level Likert Scale that ranges from “Strongly Agree” to “Strongly Disagree”

Indicate where appropriate by a tick.

Methods of Vehicle Tracking Systems	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
GPS (global positioning system)					
GIS (geographic information system)					
IoT asset tracking					
OBD tracker					
RFID tracker					

12. From your own assessment do you consider company vehicle tracking as a matter of concern in Zimbabwean companies?

NO [ ] YES [ ]

Section C. Company Vehicle Misuse

13. What do you understand by company vehicle misuse

……

……

……

14. The purpose of this section is to give you chance to appreciate how far do you agree on ways of company vehicle misuse in Zimbabwe. Please tick in the appropriate box.

Key1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree

Ways of company vehicle misuse	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Fuel theft					
Route diversion					
Picking unauthorized passengers					
Reckless driving					
Excessive idling					
Carrying personal equipments					
Joyriding					

15.What are the effects of company vehicle misuse?

Inefficiencies [ ] High Insurance claims [ ] High maintenance& Repair cost [ ] Reputational damage [ ] High fuel expense [ ]

Section D. Effectiveness of vehicle tracking systems on company vehicle misuse.

16. Is there any relationship between company vehicle tracking systems and company vehicle misuse and inefficiencies? Tick in the box appropriately.

Yes [ ] No [ ]

If No give reason ……..

……..

17. Why is the installation of trackers on company vehicles failing to completely curb company vehicle misuse and inefficiencies from the level of knowledge and experience that you have? (Select all appropriate responses)

a. Lack of supervision [ ] b. Lose Policies [ ] c. Poor monitoring facilities [ ] d. Lack of technological know-how [ ]

18.What are your recommendations to increase the effectiveness of vehicle tracking systems in curbing company vehicle misuses and inefficiencies?

…..……

……

……

……

Thank you for your co-operation

APPENDIX 2: THE INTERVIEW questions for Reserve Bank of Zimbabwe Harare and Bulawayo branch employees.

1. What do you understand by the term company vehicle tracking systems and some examples?
2. Can vehicle tracking system help in curbing company vehicle misuse and inefficiencies?
3. What are the ways of company vehicles misuse you have once witnessed or experienced?
4. Does Reserve Bank of Zimbabwe have trackers on its vehicles?
5. If yes, are there any misuse of bank vehicles still happening even trackers are installed?
6. If yes what then can be the possible reasons why trackers are not yet completely able to curb bank vehicle misuse?
7. Any recommendations that can be put in place to further the effectiveness of vehicle tracking systems in curbing company vehicle misuse?

Thank you for your time and cooperation.