

**Transforming business practices in the Zimbabwean Haulage Transport  
Business Sector in order to gain sustained competitiveness**

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## **Dedication**

This dissertation is dedicated to two special women in my life:

Maria Sai

Cathrine Shingisai Nyakurukwa

## Declaration

**Student Declaration: - I, Blessing Sai**, do hereby declare that this dissertation is the result of my own investigation and research, except to the extent indicated in the acknowledgements, references and by acknowledged sources in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.

.....

Student's signature

.....

Date

**Supervisor Declaration: - I David Madzikanda** do hereby confirm that the work reported in this dissertation was carried out by the candidate under my supervision as the University Supervisor. This dissertation has been submitted for review with my approval as University Supervisor.

.....

Supervisor's signature

.....

Date

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## **Abstract**

More companies in the haulage transport sector are finding themselves entangled in the vicious circle of stagnation and failures as a result of religiously adhering to the traditional business practices. At the same time they get pseudo comfort in the speculation of an abrupt economic revival that suits their prevailing business models and practices. Since there is not much literature on the Zimbabwean environment, specifically to the haulage business, empirical research and academic scrutiny is necessary in this area. Against this background, the research embarked on studying the transformation practices that need to be adopted so as to ensure survival and competitiveness in the prevailing environment. The major premise is that business practice transformations such as cost management, agility, best fleet management practices and innovation are critical for the Haulage Transport Businesses to attain sustained competitiveness in the prevailing Zimbabwean economic environment. In order to adequately answer the research questions, the researcher adopted the qualitative research methodology an in depth interview as a research strategy.

The main research objective was to analyse relevant business practices that have to be adapted for sustainable competitiveness of the Zimbabwean haulage transport business sector. The research findings revealed that though the Zimbabwean economic environment is not conducive for Zimbabwean haulers, some transformations in business practices can ensure competitiveness under such an environment. These practices are agility, cost management, best FM practices, innovation and collaborations that can help Zimbabwean haulers gain sustained competitiveness in an environment characterized by customs hurdles, pro-nationalistic laws and bad state of roads that are being rehabilitated. This led to the main conclusion that even though the operating environment is not ideal for competitiveness of the Zimbabwean haulage businesses, those that are able to transform their business practices are the ones who can attain sustained competitiveness in the current Zimbabwean economic environment. Furthermore, policy and managerial recommendations were that even though haulage firms can lobby and hope for an operational environment that has no customs hurdles, bad roads and balanced pro-nationalization laws, they have to transform their businesses through agility, cost management, best FM practices, innovations and collaborations in order to gain sustained competitiveness.

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## Abbreviations

|       |   |
|-------|---|
| FDI   | Foreign Direct Investment   |
| GDP   | Gross Domestic Product  |
| ICTs  | Information and Communication Technologies  |
| FM    | Fleet Management  |
| ADR   | Accord européen relatif au transport international des marchandises Dangereuses par Route |
| ZIMRA | Zimbabwe Revenue Authority  |
| SADC  | Southern Africa Development Community's   |
| SA    | South Africa(n)   |

# CHAPTER ONE

## **1. Introduction**

The current liquidity crunch, policy uncertainty, slow economic growth, rapid technological advancement, accelerated change and dynamics are critical factors that warrant the Haulage Transport Businesses in Zimbabwe to transform their business practices so as to ensure sustained competitiveness. Also of major concern is increased competition due to globalization and trade liberalization. A paradigm shift from the traditional business management practices is therefore required in order to quickly adapt to the dictates of the present environment so as to fulfill the primary objective of a business, which is to make profit in an ethical way. This chapter looks at the background, research problem, objectives, questions, proposition, its justification and the research scope. It also provides a dissertation outline and ends with the summary of the chapter.

## **1.1 Background**

### **1.1.1 Overview of Zimbabwean Business Environment**

The prevailing business environment that is characterised by tight liquidity manifested through near deflationary conditions and high underperforming loans has wreaked havoc to the country's economic growth. This has left the economy in terrible requirement of substantial capital injection (Africa Monitor, 2012) which is however not forthcoming, making the available capital very expensive. The situation is not expected to improve in the immediate future as the economy is projected to grow at a very restrained rate (ibid). This is not good news for the business practitioners. Most of the companies that vowed to adhere to traditional business practices and hope for an immediate improvement of the Zimbabwean economy are either struggling to survive or have closed business regardless of their gigantic nature. These closures had a ripple effect as unemployment rose, resulting in restrained buying power, which in turn affected other businesses. Thus, it is needful for businesses to transform their practices in order to ensure survival as a short term objective and competitiveness as an intended lasting objective.

Though most of the articles on the Zimbabwean business environment have been written with optimism, the current situation can be argued to be inconsistent with these submissions. Firstly, Zimbabwe is poorly ranked on the global economic competitiveness. An example is the "Doing Business" (World Bank) ranking of 172 out of 185 in 2013 (U.S. & Foreign Commercial Service, 2013, Tsokota & Solms, 2013). Its current account balance is not recovering as it is still heavily in deficit (Short, Barnor & Gopaldas, 2012, Africa Monitor, 2014). This is because of constrictions like financial sector volatility and fiscal slippages whose dislocation from global credit markets hampers its ability to benefit from global funds. Under such circumstances, the credit environment is greatly affected.

Secondly, this situation is further worsened by the country's inability to attract significant long term capital flows because of political uncertainty and indigenization threats which affect investment decisions and Foreign Direct Investment (FDI) thereby limiting FDI flows into the economy (World Bank 2009, Short *et al* 2012, International Monetary Fund, 2012). As Africa Monitor (2012) rightly consents to this view, foreign inflows have not been forthcoming due to donors' and investors' disapproving assessment of Zimbabwe's political situation. The World Bank (2009) also argues that this causes businesses to rely on short term flows and this is not ideal for the economy.

Thirdly, Zimbabwe is in massive debt distress as highlighted by Kramarenko, Engstrom, Verdier, Fernandez, Oppers, Hughes, McHugh, and Coats (2010) who state that the debt is ever accumulating and is projected to reach approximately 151% of the Gross Domestic Product (GDP) by 2015. Combined with the absence of long term capital inflows, this negatively impacts Zimbabwe's liquidity which is wreaking havoc to the business environment. This is evidenced by stagnant deposit growth with banks struggling with non-performing loans. Thus, capital bases are further eroded (Africa Monitor, 2014). Short *et al* (2012) further propagate that credit leveling off, short term deposits and an ineffective regulatory structure negatively affect financial stability. Africa Monitor (2014) argue that this is worsened by the incapability of the Reserve Bank to grow the money supply in the absence of external injection through FDI, portfolio investment, export revenues, foreign loans and grants. Accordingly, businesses have to transform their practices in order to attain sustained competitiveness in such an economy.

Finally, poor infrastructure, which is third most frequently cited impediment to businesses in Zimbabwe after access to finance and political uncertainty, is also adversely affecting Zimbabwe business environment. The dilapidating infrastructure, combined with high maintenance costs, poor networks, revenue leakages and bottlenecks especially in roads, information and communication networks, negatively affects business competitiveness in Zimbabwe. Business costs in Zimbabwe are on the high side compared to other countries in Sub-Saharan Africa (Short *et al*, 2012, Tsokota and Solms, 2013, IMF 2012, Tukuta, Nkhosa & Gono, 2011). Kramarenko *et al* (2010) further affirm that Zimbabwe's competitiveness is pathetic using all measurements (governance, investment climate and price indicators). This underinvestment scenario is limiting economic growth potential as the economic infrastructure is ranked 101 out of 133 countries surveyed in the Global Competitiveness Report (Kramarenko *et al*, 2010)

### **1.1.2 Background to the Zimbabwean Haulage Transport Business Sector**

Though transport and communication contributes up to 8% of the GDP, the haulage business falls far below the expected efficiency levels (Zimbabwe Investment Authority, 2010). Whilst the Zimbabwean cross border haulage business was dominant during the nineties, it is increasingly ceding control to South Africa (Transport Logistic Consultants, 2007). Tukuta, Nkhosa & Gono (2012) argue that haulage business in Zimbabwe is characterised by gross inefficiency and incompetence in its fleet management that is attributed to poor routing and scheduling, driver briefing and debriefing, vehicle maintenance, fuel management and absence of truck financing reserves. This leaves the haulage transport businesses with no option but to transform their business processes in order to be competent so as to avert the now normal Zimbabwean scenario of company underperformances and worse still, closures.

Some of the challenges include poor road infrastructure and networks, accidents, scheduling and routing, breakdowns, criminal activities, pilferage and the HIV/AIDS pandemic which is mainly affecting haulage drivers (Tukuta, Nkhosa & Gono, 2012). There are also claims that poor road infrastructure is a Sub-Sahara Africa's menace as it has the lowest percentage of properly surfaced road worldwide. The other argument is that African roads maintenance is heavily neglected, which adds more backlog to construction of roads that are currently constructed in secluded small segments instead of interconnected systems (Prinsloo &

Mouchili, 2008). Tukuta *et al*'s (2012) specific assessment of Zimbabwean roads notes that trucking business is being progressively affected continually deteriorating roads. This unfortunate bad road condition contributes to accelerated deterioration of trucks (Parliament of Zimbabwe, 2014).

There has been an express growth of haulage trucks in the recent years which can be attributed to National Railways of Zimbabwe's (NRZ) severe decline in its capability to meet the ever-increasing demand of freight activities. This has seen the Zimbabwean registered truck number growing from 27,400 in 1990 to 52,100 in 1999 and to about 75,000 in 2009 with some noteworthy structural transformation of the industry to relatively different trucking categories which are; nationwide trucking, cross-border trucking, and local distribution trucking. However, there seems to be a substantial variance between Zimbabwean road freight tariffs when compared to Regional rates with the domestic rate nearly one and half times higher than the regional average rates (African Development Bank Group, 2012). The quarterly presumptive tax for haulage trucks that vary from US\$1 000 to US\$2 500 seems to be also contributing to high trucking costs in Zimbabwe (KPMG Zimbabwe, 2012). This is further worsened by congestion at the borders which can be argued to be a liability as it can take even two days for haulage trucks to be cleared at the borders. (Parliament of Zimbabwe, 2014)

### **1.1.3 Implications from the background brief analysis**

Though there is literature on general remodeling of businesses on the global scale, this research is vital as it will pay particular attention to the haulage transport businesses in Zimbabwe. The research therefore seeks to link other similar global researches and publications in response to economic crisis to the Zimbabwean environment for sustained competitiveness. The emphasis is on ways in which the haulage transport companies can transform their business processes so as to quickly adapt to the dictates of the environment and come up with strategies that ensure sustained competitiveness. The main focus is on agility, innovation, cost cutting measures and best practices on fleet management so as to ensure profitability, which leads to sustained competitiveness.



### **1.3 Problem Statement**

More companies in the haulage transport sector are finding themselves entangled in the vicious circle of stagnation and liability as a result of religiously adhering to the traditional business practices while getting pseudo comfort in the speculation of an abrupt economic revival that suits their prevailing business models and practices. Since there is not much literature on the Zimbabwean environment, specifically to the haulage business, empirical research and academic scrutiny is necessary in this area. Because of this, the researcher embarked on studying the transformation practices that need to be practiced so as to ensure survival and competitiveness in the prevailing environment.

### **1.4 Research Objectives**

Since the research endeavors to analyse the transformation of business practices to gain sustained competitiveness, it is against this background that the objectives of this research will focus on the critical components of the new business practices that are vital for sustained competitiveness in the Zimbabwean business environment.

#### **1.4.1 Main Objective**

The main research objective is to analyse relevant business practices that have to be adapted for sustainable competitiveness of the Zimbabwean haulage transport business sector.

#### **1.4.2 Specific Research Objectives**

The specific objectives of this research are;

- i. To explore the cost management measures applicable to the haulage businesses in the Zimbabwean business environment so as to gain sustained competitiveness.
- ii. To analyse the effects of agility to competitiveness of haulage business in the Zimbabwean business environment.
- iii. To determine the best fleet management practices that ensure sustained competitiveness of the haulage business in the Zimbabwean Economy.

- iv. To evaluate the importance of innovation to the haulage business in order to gain sustained competitiveness in the current business environment in Zimbabwe.
- v. To make recommendations on business practices which ensure sustained competitiveness of Zimbabwean haulage transport business sector.

## **1.5 Research Questions**

The research expects to address the vital questions that are critical in the transformation of business practices of haulage businesses so as to gain sustainable competitiveness in the prevailing challenging Zimbabwean economic environment. The main research question and specific research questions are highlighted below.

### **1.5.1 Main Research Question**

The main research question is what are the relevant practices that have to be adapted in order to gain sustainable competitiveness of the Zimbabwean haulage transport business sector?

### **1.5.2 Specific Research Questions**

The specific research questions are;

- i. To what extent does cost management ensure sustained competitiveness of haulage business in the Zimbabwean economy?
- ii. How critical is agility effective in guaranteeing sustained competitiveness of the haulage business in the prevailing economic conditions in Zimbabwe?
- iii. Do best fleet management practices lead to sustained competitiveness of haulage business in the Zimbabwean business environment?
- iv. What is the importance of innovation in ensuring sustained competitiveness in the prevailing economic environment of Zimbabwe?
- v. Which recommendations must be made on business practices that gains sustained competitiveness of Zimbabwean haulage transport business sector?

## **1.6 Proposition**

The basic proposition is that business practice transformations like cost management, agility, best fleet management practices and innovation are critical for haulage transport businesses to attain sustained competitiveness in the prevailing Zimbabwean economic environment.

## **1.7 Significance of the study**

Since there is not much existing knowledge on transforming haulage transport business practices in the Zimbabwean business environment, the study seeks to provide an insight on the existing haulage businesses on transformation of business practices for them to attain sustained competitiveness in spite of the challenging economic environment whose growth has been subdued. The researcher also seeks to acquire relevant, rich and valuable knowledge in the field of study. The study also seeks to publish this research paper so as to academically contribute to an existing body of academic knowledge through providing academic contributions to transforming haulage transport business practices in the Zimbabwean business environment. By doing so, this can also stimulate further research in transforming business practices in haulage transport business and other businesses in Zimbabwe as this area of study warrants much research that cannot be addressed by a single research.

## **1.8 Scope**

Since it is a cross sectional research, the research will focus on established haulage transport companies in Harare and Mutare. Harare is a hub of economic activities and since the researcher is usually based at Mutare, the researcher can have easy access to companies based in Mutare.

## **1.9 Dissertation Outline**

The dissertation outline is as highlighted below:

### **Chapter One: Introduction**

This chapter looks at the problem statement, background, justification of the study, research objectives, questions and propositions.

## **Chapter Two: Literature Review**

This chapter critically assesses the existing literature that is related to the problem so as to facilitate research methodology and presentation, conclusions and recommendations.

## **Chapter Three: Research Methodology**

This chapter explains the design of study focusing on the various research philosophies, approaches, methodologies, target population, sampling methods, development of research instruments data collection procedure and data collection procedure. It will also justify why the selected methodology aspects in this dissertation paper have precedence over others.

## **Chapter Four: Presentation and Discussion**

This chapter gives a critical analysis and presentation of the data gathered during field research.

## **Chapter Five: Conclusions and Recommendations**

This is the final chapter that outlines conclusions and recommends the ideal course of action to the intended beneficiaries of the research topic.

### **1.10 Chapter Summary**

The economic situation in Zimbabwe is not favourable for the haulage trucking firms that are stuck to traditional practices. This raises the need to transform pivotal business practices for such firms to attain sustained competitiveness. Failure to do that can be a recipe for failure that can lead to closures as they will fail to gain sustained competitiveness in today's business world. This chapter covers the introduction, background of the study, problem statement, research objectives, research questions, proposition, significance of the study, research scope and dissertation outline.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

As Londoño-Kent (2009) rightfully states, businesses exist to create wealth and sustain growth. In fulfilling this purpose, transportation, especially road freight transport is vital as it employs many people and contributes significantly to GDPs of developing countries. It is the principal form of transportation for national, regional, and worldwide cargo. This indicates that no nation's economy can survive in the absence of road freight transport, as it is vital in all economic activities. Even though haulage business is vital, it is not impervious to the ever-changing and increasingly unpredictable business environments.

Transformation of practices is inevitable as traditional business models are now being challenged by the advent of new and non-traditional competitors and increasing customer demands (The Economist, 2009). Azevedo, Ferreira & Leitão (2008) also share the same sentiment as they argue that organisations are under pressure to amend their traditional management styles and switch to integrated systems that improve the speed and volatility business operations. Morris (2006) shares the same sentiment as he argues that organisations must initiate and embrace transformation so as to generate customer value in a peculiar way so as for the firm to be ahead of competitors. However, as Doz & Kosonen (2010) argue, transforming the business model of prosperous companies is certainly not always easy as it means deviating from established cultures and practices.

For firms to be successful, they have to be highly flexible and operationally integrated so that they can deliver inimitable value as firms are becoming smaller, simpler and swift to adapt to market demands thereby becoming competitive (Olson 2006, Zaušková, Bobovnický & Madleňák, 2013). Thus the global wave of revising business practices increases pressure on cost structures, which results in numerous and widespread transformations in practices as firms are forced to rethink their business practices (Grasil, 2009).

However, it is unfortunate that some firms are failing to deal with the increasingly dynamic environment, characterised by complexity and uncertainty by sticking to business as usual practices that view change as an element that has to be controlled and eliminated instead of accepting it as the new norm that has to be embraced, managed and planned (Perkins, 2012). What has to be accepted, as Santala (2009) rightly argues, is that the fast changing globalized business new settings leaves not even a single firm unaffected by competition anymore as uncertainty now makes long term strategic planning irrelevant and uncompetitive as dynamism drives away certainty of even the near future. The old norm of once in a life time business transformation, ignited by a sporadic, brief disruption is no longer applicable to today's business as change is now a continuous, dynamic process (Chandler Macleod, 2010).

This trend is forcing the trucking industry to reconsider their practices and policies in order to ensure survival, without which can result in non-profit and declining competitiveness (Rishi, Gyimesi & Burek, 2009). The Economist (2009) also encores that globalization is now characterised by volatility and recessions, the situation that is further worsened by the appearance of sprouting, non-traditional competitors who are able to meet the ever-changing customer demands that continue to disrupt traditional business models whose powers are being continually eroded. So businesses have to evaluate and adjust their business models and also turn into experts at doing so (Scott-Kemmis, 2012). This then calls for well-timed communication and interconnectedness to ensure accurate flow of information (Barni 2013).

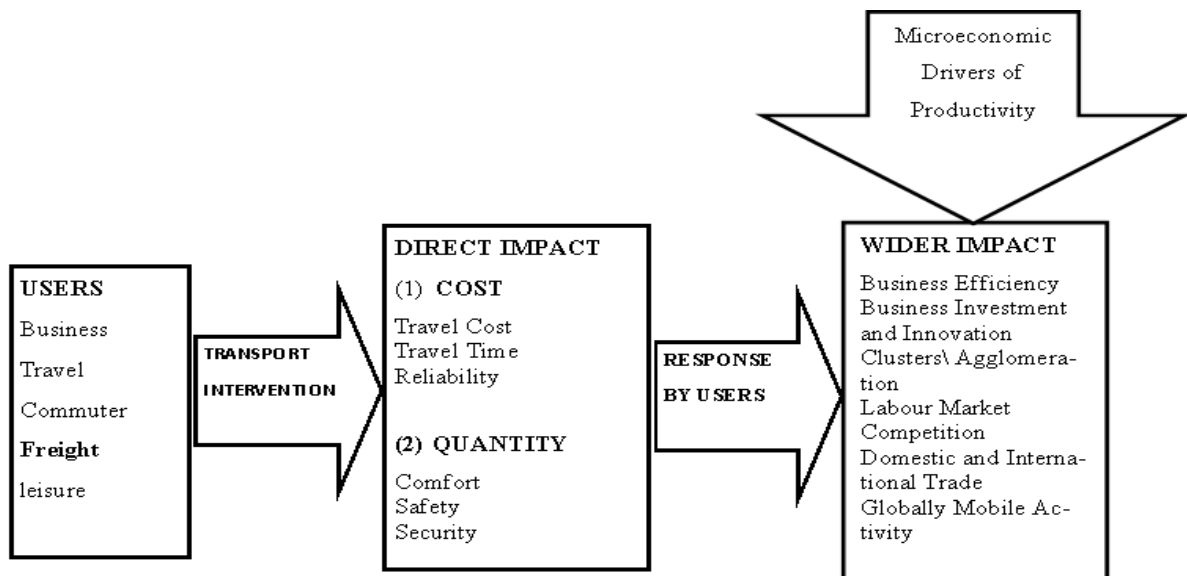
This chapter therefore firstly analyses the underpinning theories followed by existing models, then an analysis of transformational practices that bring forward sustained competitiveness under the Zimbabwean operational environment, which will then form a basis for the conceptual framework.

## **2.2 Underpinning Theories**

### **2.2.1 Transport and Productivity Theory**

This theory was developed by Eddington Transport Study with an aim of integrating land use transport models to evolve towards being more comprehensive. This theory attempts to merge the relationship that exists between provision of transport and economic productivity that had

been neglected by previous land transportation theories which inherently presented an imperfect portrayal of the costs and benefits available in the transportation system. It also includes the agglomeration effects so as to avoid miscalculating the costs and benefits that are inherent in transport provision on productivity. Its diagrammatic representation is illustrated below:



Source: Sivakumar (2007)

**Figure 1: Transport and Productivity Theory Model**

The theory provides the linkages between transport and economic performance. The user of such transport (in this case, freight) is directly affected by costs, travel time, reliability, safety, security and other various factors. The response of such users is based on productivity impact perceptions like increased business innovation, investment, competition, trade, global and mobility. So, these purported benefits of productivity can also increase agglomerations and clusters that may lead to increasingly continual benefits (Sivakumar, 2007).

## 2.2.2 Logistics Flow Game Theory

Reyes (2005) presents a logistics theory known as the Logistics Flow Game Theory that is propagated by Kalai and Zemel. This theory describes how best to send objects from one place to another within a network. So it defines a flow as a way to send objects from one position to another. These flowing entities are known as flow units, regardless of their nature. So the objects are supposed to follow a node that begins at a source and ends at a sink. The

source nodes are entrance nodes that offer supply as represented by the figure of units that are present at that node. The sink node has demand that is also represented by the figure of units that have to be routed there. The cooperation of stakeholders and players involved in sending the items from one position to another is called the flow game. So each option has its own maximum flow for any coalition (Reyes, 2005).

Aparicio, Llorca & Sancho(2009) further add that Game Theory analyses cooperation and conflict circumstances which involve more than one rational and intelligent agents. The theory has two main approaches, which are; the cooperative and non-cooperative games. The main distinguishing consideration of these approaches is the possibility of reaching binding agreements. A cooperative situation is possible when there are binding agreements. In such an environment the concept of cooperation becomes vital in achieving cooperation of all agents. They further state that this theory associates a coalitional game to every problem which then condenses the savings realised by each alternative coalition. This is then used to analyse different game theory topics like solution concepts and steadiness. This then helps to determine savings or extra benefits of cooperation amongst the involved agents. This also helps to solve logistics related problems like routing, storage, inventory, distribution and frequency from a non-cooperative or cooperative perspective.

Nagarajan & Sosi (2008) further came up with multivalued-mapping and single-valued mapping as the other approaches to cooperative game theory. Multivalued-mapping approaches like core and coalition structure core allocate sets of values that generate stable viable solutions. On the other hand, single value mapping approach detects precise allocation by a set of axioms that serve as allocation rules. An example of single value mapping approach is the Shapley value. The Shapley value states that costs and benefits are spread amongst different contributors ranked according to the importance of their roles in the cooperative activity.

### **2.2.3 General assessment of the underpinning theories**

The above discussed underpinning theories have a great bearing on the operations within the logistics sector, which is hinged upon effective transportation. These theories cover issues like innovation, cost management, collaborations and good fleet management practices. However,



both theories do not adequately address the issue of agility, which is a new trend that is vital in today's haulage transport sector.

### **2.3 Existing Models**

This section describes and analyses various current models that cover the logistic\ transportation business so that they remain competitive in this dynamic and unstable economic environment.

#### **2.3.1 Logistics Optimization Model**

This model emphasizes on optimising the whole logistics system for competitiveness. This is because of the fact that total cost and responsiveness optimization are now critically vital for the success of the transportation company. The current transportation industry is increasingly affected by emerging factors like dynamic customer requirements, regulatory changes, evolving technologies and handling of materials, effective communication, competitive pressure, enhanced financial performance and dynamic distribution channels. This then calls for the handy, essential redesigning of the logistics system for effectiveness. Distribution now needs a tradeoff between cost reduction and quick response which must be prudently crafted so as to remain competitive.

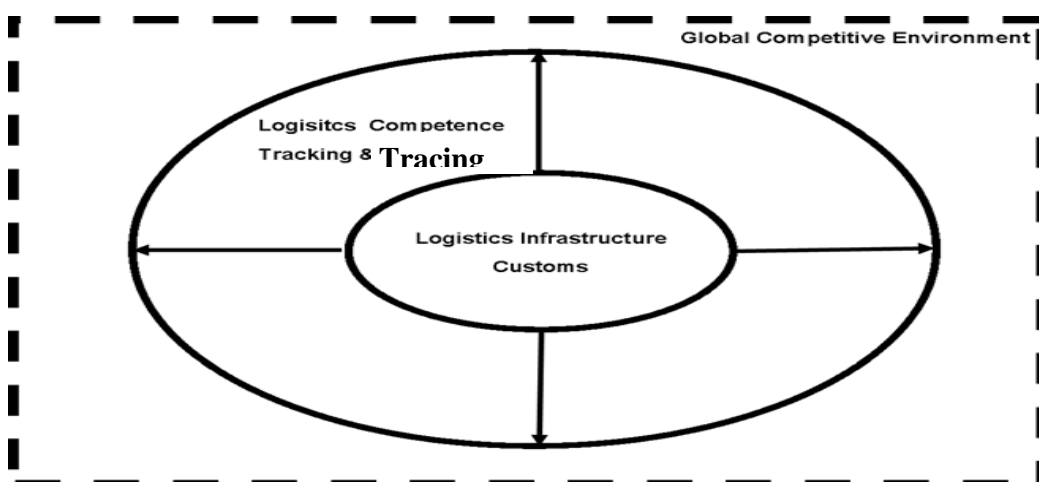
This calls for the transformation of the 4 Ps of competitiveness (product, promotion, price, and place) that are no longer responsive to the recent market developments to the 4 Rs which are; responsiveness, reliability, relationships and resilience to remain competitive in this dynamic industry. These 4Rs can be argued to constitute the new competitive framework that is applicable to the logistic\ transportation industry. Reliability calls for effective delivery of cargo to the customer at low cost but with high service quality due to reduced non value adding activities. Responsiveness then calls for increased information transparency so that cargo can be quickly transported to the point of use in shorter lead time at reduced costs. Resilience requires mechanisms to combat risks and uncertainties that are prevalent in this global dynamic business environment. This calls for establishment of risk audit teams that have to monitor risk management processes for easy risk mitigation and management. Relationships dictate that there must be effective collaborations of every relevant stakeholder

involved in the trucking business. This also calls for triumph over geographical and cultural barriers so as to attain full integration. This optimisation model is hinged upon agility as the company has to be capable of turning perpetual and unpredictably evolving customer prospects into profitability. So for the trucking organisations to be agile, they have to be market sensitive, network based, virtual and project aligned (Arayapan & Warunyuwong, 2010).

This model places much emphasis on cost management and agility while it moderately considers innovation and collaboration, which is impliedly embedded in cost management and agility. Less emphasis is placed on best fleet management practices.

### 2.3.2 Relational National Logistics and Competitiveness Model

This model analyses logistics competences that have to be utilized for countries to attain strategic competitiveness in the integrated global economy. It illustrates how a country develops and shapes its national logistics strategy to consolidate its competitive power and logistics competence. The model argues that national logistics performance is the main determinant of the national competitive power. This implies that national competitive power is strengthened by a well-developed logistics performance.



Source: Burmaoglu & Harun (2001)

**Figure 2: Relational National Logistics and Competitiveness Model**

The model argues that logistics infrastructure in form of Information and Communication Technologies (ICTs) is the main determinant of high and low logistics competitive countries. Though infrastructure involves all transport modes, it is the ICTs that determines a country's logistics performance mainly because of the assertion that logistics infrastructure can gain an innovative value only with ICT. The other main determinant is customs. Customs' services and infrastructure play a key role in the national logistics performance in a global economy.

Once the logistics performance is put at a competitive level, a country must then focus on logistics competence and tracking and tracing variables so as to maintain its competitiveness. This also focuses on logistics competence and tracking and tracing variables. Logistics competence can be improved by the public sector's ability to critically prepare legal protocols and investment allocations to improve competences. The private sector must also have global competitive power and enhance strategies that provide better logistics services quality that increase the trade volumes within that country. This will ultimately add value to a country's competitiveness. Tracking and tracing help to sustain reliability as it provides a platform for effective monitoring that guarantees certainty, shorter lead times and lower costs. It is only when logistics infrastructure and custom requirements are fulfilled that a country can then be classified as highly competitive. When a country attains a high competitive position it must then concentrate on logistics competence and the tracking and tracing areas in order to advance its competitive supremacy and gain value in the worldwide competitiveness (Burmaoglu & Harun, 2001).

This model looks at national logistics competitiveness instead of individual transport company's competitiveness. It mainly emphasizes on innovation through logistics infrastructural development. To a lesser extent, it has implications of fleet management, cost management and customs efficiency. However, it makes no mention of agility, which is argued as vital in this current dynamic and turbulent business environment.

### **2.3.3 Logistics Innovation Model**

This model concentrates on innovation as a tool for survival within the logistics industry. Innovation is argued to occur within services, practices, or any enterprise system. Logistics innovation denotes to any logistics-related service whether simple or complex, which is

perceived as novel, enhanced, and supportive to a particular area. The prevailing environment forces logistics companies to regularly look for innovative strategies for them to be able to advance in logistical competitiveness.

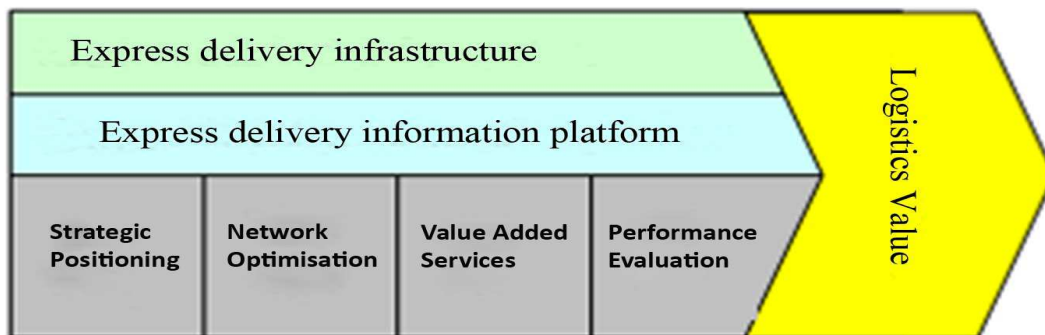
Innovation can therefore be realised through process rationalization which is a multi-dimensional knowledge structure comprising of strategic bearing and trans-functional philosophies which directs the company's strategic management. This model implies that innovation is also embedded in communication which has forced companies to externally and internally restructure so as to rapidly, innovatively, and flexibly respond to dynamic and splintering market demand so as to remain competitive. This raises the need for ICTs which have a great impact on company's competitiveness as it reduces costs and improves service levels through network communication and relationship networks that enables direct communication between the firm and the customer at any given time. It enables information sharing across the supply chain. Such logistics motivation leverages the firm to a better operational performance that is realised through cost reduction, delivery performance and customer satisfaction.

Delivery performance ensures shorter lead times (time taken between order placement and actual delivery). So logistics innovation ensures perfect timely distribution which is positively affected by ICTs to enable extensive delivery at lower costs. This in turn leads to costs reduction which is the dream of all trucking companies. However this is linked to flexibility as the logistics company has to be flexible to customer demands. A low delivery cost denotes innovative process efficiency in handling uncertainty and in efficient problem solving. Customer satisfaction designates effective service that attracts and retains customers due to responsiveness, flexibility, and dependability (Sakchutchawan, 2011).

This model has a weakness of giving innovation precedence over all other variables that can lead to competitiveness. It places all other variables such as cost management and fleet management practices as part and parcel of innovation when in actual fact they can be stand-alone variables. It makes limited reference to agility which is critical for competitiveness in this turbulent world.

### 2.3.4 Logistics Value Chain Model

This model was developed from Michael Porter's Value Chain Analysis model with the aim of enabling logistics companies to detect the key undertaking, discover novel profit development points, create value upgraded customers and businesses, which ultimately leads to the core logistics competitiveness. Transportation companies have to create value in the supporting services like transportation infrastructure and also in the information platform. It can do so through delivery information sharing, assembling its delivery network and evolving its e-commerce. These supporting activities are vital in the vital establishment of the operational activities by creating value firm the third profits resources.



Source: Zhou (2013)

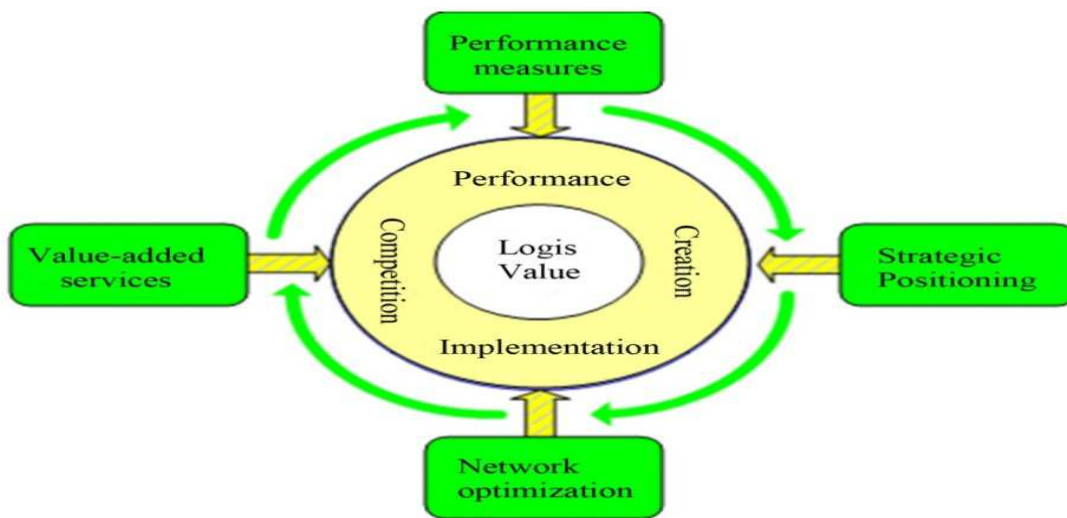
#### Figure 3: Logistics Value Chain Model

In this model, strategic positioning, value added services, network optimisation and performance evaluation are the key aspects of the basic operational activities. So a business has to strategically position itself in order to attain optimal value. It also has to consolidate its distribution networks so as to get the most from it while at the same time adding value to their services. A business must also monitor its performance so as to remain competitive. This logistics value chain deviates from the traditional aspect of differentiating the customer as solely the external customer and the services as internal customer. It combines the internal and external factors in order to synchronously improve the service quality of both internal and external customers so as to achieve core logistics competitiveness (Zhou, 2013).

This model, though it is vital for competitiveness, it mainly focuses on the internal business processes (innovation) that add value at the expense of external influences like environmental

scanning that might affect competitiveness and also create the need for agility. Its internal business value addition implies the importance of vital factors like innovation and fleet management. However it makes no reference to cost management, which is increasingly becoming relevant in today's logistics companies.

### 2.3.5 Logistics Competitiveness Model



Source: Zhou (2013)

**Figure 4: Logistics Competitiveness Model**

This model is a development from the Logistics Value Chain Model. It emphasises that the competitiveness of a logistics organisation is developed on the four key pillars which are; network optimization, strategic positioning, performance measures and value-added services. The key main difference of this model from its predecessor is that this model takes no regard of the supporting services of standalone activities that are embedded in the operational activities. This model stresses that a firm has to competitively and accurately position its resources so as to be relevant to the market. Strategic positioning entails how to properly position logistics activities from structure to strategy. All activities have to be integrated to ensure competitiveness. On the other hand, it achieves a competitive synergy effect. There has to be a coordinated mechanism between external and internal processes that controls total operational costs and cross functional processes.

Value added service enhances competitiveness through effective response to the rapidly changing customers' demands to ensure their satisfaction. It ensures attainment of the goal of logistics, which is to serve customers by creating value in them. On the other hand performance evaluation ensures successful fulfilment of the functions of the logistics system. It entails measuring the logistics' effectiveness and efficiency process in the areas of proper control and cost management. There is therefore a need for a monitoring mode for network optimisation, strategic positioning and value added service (Zhou, 2013).

This model, just like the previous model greatly emphasises on the internal processes at the expense of the other non-internal processes that are also vital to ensure competitiveness. It was developed specifically for express services though it can be generally applied to any logistics service.

## **2.4 Factor Analysis**

The existing frameworks covered some aspects of the stated factors to varying extents. However it is of great importance to look at practices involved so as to come up with a conceptual framework that is going to shape the research process. The stated transformational practices are cost management, agility, innovation and best fleet management practices.

### **2.4.1 Cost Management**

Kearney (2000) argues that logistics costs for many companies represent a significant chunk of the total of sales revenue. The same is propagated by Londoño-Kent (2009) who acknowledges the complexity of managing logistics in the current environment as it is increasingly becoming costly due to increases in fuel prices. This then calls for realization that cost management is the fundamental issue in any business enterprise. Arvis (2005) states that these trucking costs are approximately fifty percent higher for landlocked countries than for countries that have access to oceans even though the trade volumes in landlocked countries are sixty percent less. Ratcliffe (1987) as cited by Takuta *et al* (2012) emphasizes that fleet managers must place great importance on cost management to ensure cost effectiveness. Jenkins (1999) also endorses the same view by asserting that delivering products through lowered transport costs is the foundation of sound transport logistics. Hassan, Bakar, Yusof, Awang & Adamy (2011) further argue that firms have to lessen costs as a precautionary

measure for any unforeseen challenge. Even a minor cost reduction can result in substantial savings over time (Evans & Annunziata, 2012).

Vehicle productivity, which varies in terms of hauling distance, consignment nature and size and condition of the road, has a bearing on trucking costs (Lu & Yirong, 2002). Some of the factors affecting transport costs include empty running, idle time, working hour restrictions, slow, irregular, and unreliable transit, excessive handling and storage costs, border procedural delays, vehicle maintenance, service quality, protective measures against pilferage, damage and theft, road permits, taxes, salaries and bribes (Jenkins, 1999, Vinci, 2005, The International Institute for Sustainable Development, 2013). While there is a need to minimize costs, customers' expectations also attach vital importance to aspects that can increase costs like speed, delivery time predictability and door to door deliveries. So there is need for a balance between service excellence and cost reduction (Jenkins, 1999).

Berwick and Farooq (2003) state that economies of utilization and economies of size makeup haulage business industry's costs. Teravaninthorn & Raballand (2009) further argue that truck fleet age and low vehicle utilisation are also substantial determining factors of road haulage transport costs. Fuel costs can be more of a headache because of its direct usage in the actual business operations where it is argued to comprise roughly 20–25 percent of the total costs of the haulage trucking business. The other cost that is also of great importance is the labour cost. Poor worker retention structures can result in high staff turnover as the company will be spending more on continuous recruitment and training of drivers. These drivers, if they are not properly trained can also be costly to the company due to bad driver conduct such as over speeding, rough braking, swift acceleration, vehicle abuse that can lead to accelerated premature wear and tear and more often than necessary maintenance schedules. This bad practice not only negatively affects the truck; it can also compromise driver and cargo safety (Frost & Sullivan, 2011).

Tukuta *et al* (2012) then propose ethical measures to minimise costs whilst maximizing profit like networking, relationship development within the whole supply chain management. Londoño-Kent (2009) has a slightly different but holistic idea of cost management by



combining three technically linked costs which are handling/ storage, management and transport as the rubric logistics costs which can be used to craft optimal solutions from which, he said may include economies of traffic density, network size and economies of scale.

So proper and effective cost management can result in substantial cost savings and while at the same time improving service delivery and realizing low unit costs, such as cost per mile, trip or hour (Burkhardt & Levi, 2005). The same is argued by Al-Iryani & Gassin (2005) that trucking companies have to aim to discover the best optimum delivery arrangement that yields the most optimal level of service quality at the bottom most possible budget to the organisation. In an effort to cut costs, the transport industry has to rapidly transform at a continual and rapid rate from mere provision of tactical transportation to a cost control and excellent service provision to customers leading to integrated logistics provision. Any expenses incurred as the organization adjusts to changes that result from customer demands must be properly handled so as to ensure non erosion of profits to the trucking company. The nature of the distribution structure and the network of the depot within a system of transportation also have an effect on the optimization of total transportation costs (Lu & Yirong, 2002).

The issue of customer focus is also shared by Lai & Cheng (2004) who state that challenges brought about by global competition now force organisations to concentrate more on assessing customer needs and look for methods to decrease costs but at the same time improve quality in meeting the customers' ever escalating preferences and demands. However, the maintenance of such a balance is the biggest and most strenuous challenge as the two objectives of trucking cost savings and improved customer service may seem to be mutually exclusive projects that have contradictory objectives that are difficult to merge. To achieve, this, use of ICTs is fundamental as innovative technological breakthrough and subsequent continual adjustments can help to improve quality while at the same time improve customer service. This can be argued to differentiate between transportation cost leaders and transportation cost laggards who are comfortable in their cocoon of traditional practices that have a disruptive effect on trucking business organizational survival (Kalathil, 2009).

### **2.4.2 Agility**

Agility, which involves rapid movement, nimbleness and vigor, is essential for any modern business. Though it is sometimes used interchangeably with flexibility, it differs with flexibility in that flexibility is more concerned with the ability to respond to predicted change whilst agility denotes to the capability to quickly respond to unforeseen market place dynamics. Christopher & Towill (2000) argue that agility should be viewed as a business-wide competence that should be holistic enough to embrace information and communication systems, company structures, supply chain processes and, of great importance, the mindsets. Mason-Jones, Naylor & Towill (2000) seem to agree with the above sentiment by arguing that an agile business should have that ability to survive variations and turbulences and should position itself so as to manipulate these fluctuations for profit maximization.

Highsmith (2009) goes on to argue that agile companies must be able to both create and respond to any change so as to be competitive in a volatile economic environment. Doz & Kosonen (2008) reinforce the same argument by purporting that agile organisations must have the ability to make fast and swift turns for them to effectively transform and renovate their businesses whilst maintaining the same momentum. Gunasekaran, Lai & Cheng (2008) state that agility should be focused on meeting customer needs while at the same time sustaining high quality standards while regulating all costs of doing business. Calvo, Domingo & Sebastian (2007) also argue that the stormy business atmosphere, deepened worldwide competition, differentiated demand, ever-changing technology requires managerial agility that encourages technological agility to meet the customer need for survival.

The existing environment has led to a new business paradigm in response to volatile markets and changing customer preferences and tastes as agility is more of flexibility, swiftness and speed (Sanchez-Rodrigues, 2006). Its vital pointers are; know when to transform, what and how to change. Increased deregulation that resulted in decreased protectionism and removed trade barriers led to a wider playing field which generated an uncertain, volatile, and dynamic business environment that is difficult to predict (Doz & Kosonen, 2008). Once a company becomes agile, it is more likely to become profitable as research suggests that agile companies grow faster and make more profits than non-agile corporations. Failure to be agile leads to competitive disadvantage as there will be low response to market dynamics. However, agility

is affected by slow decision making within large corporations mainly as a result of lengthy approval processes before implementation, antagonizing departmental interests and risk avoidance culture (Perkins, 2012)

Agility is not easy to implement as argued by Christopher (2000) who emphasises that the companies' degree of complexity relating to its trademarks, services and products, how it is structured and managed can hinder its implementation of agility. Lim & Mavondo (2000) seem to provide a solution to the above-mentioned sentiment as they argue that capability development that heightens capacity utilisation efficiency to the resource coordination has weighty implications to companies' degree of agility. Highsmith (2013) further postulates that realizing organizational agility calls for a different management style with a leadership that is adaptive which lead to organizational agility through identification of what such leaders must do and identification of the mindset of adaptive leadership. Hamel & Välikangas (2003) also argue that agility is realized by uninterrupted keenness and also fine tuning to current trends and customer expectations without deviating from the vision of the company.

Doz & Kosonen (2010) also argue that strategic agility comprises of resource volatility, mutual commitment and strategic sensitivity that enables organisations to recognize early, resolve speedily, and strike with power and promptness. It is apparently a foundation to the capability to transform and refurbish business models. The control of a dynamic agile system requires agile management which, if successfully implemented could result in the conversion of the desired agility into reality. However, as previously mentioned, the ultimate goal of turning that desirable agility to actuality is a big challenge. One can argue that strategic agility views strategy not as a simple, single approach to the market but as an assorted assortment of meticulously linked semi coherent strategic direction. This raises the need for reinventing and discovering innovative methods of value creation (Santala, 2009). Even though strategic direction is still of vital significance in the present volatile economic situation, it should be traded with strategic agility (Atkinson, 2005).

Firms have to realize that the days of trying to avoid agility are over because of the prevailing economic situation that is characterised by unpredictability and interconnectedness. Agility senses, notices and reacts accordingly. It is proactive as it demands flexibility, creativity,

balance, resilience and adaptability. It improves when organisations manipulate all major stakeholders' expertise to recognize, appreciate and react accordingly to dynamic change and disruption (IBM 2012). Chandler Macleod (2010) also argues that it is both possible and essential for businesses to plan for agility. For agility to be effective, it should be buttressed by infrastructure, management, structure and the embedded business culture for the business to face new challenges like globalisation, information and communication technology shifts, and customer pessimism. An agile company should be able to innovatively meet customer needs, share information and interact with all relevant stakeholders.

Conversely it can be argued that Zimbabwean trucking companies are not at tandem with the global changes thereby exposing a weakness in their agility effectiveness as they are still sticking to traditional business practices when the global business has forced many corporations elsewhere to employ agile measures for survival in the dynamic environment. One may argue that Zimbabwean companies need to practice lean business processes that enable them to be agile for them to rapidly and effectively meet customer demands (Goriwondo, Mhlanga & Mutsambwa, 2013)

### **2.4.3 Fleet Management**

The objective of fleet management (FM) is proper, and effective management of vehicle fleets in order to satisfy the ever evolving customer needs (Powell & Topaloglu, 2002). Ittmann & King (2010) argue that FM is of vital importance since transportation costs constitute quite significant element of total logistics costs in most countries. The same is echoed by Sreenivas & Srinivas (2006) who argue that since transportation accounts for almost a third of the logistics costs; its systems largely define the logistics system performance. So if the transportation system is good, the logistics system will be efficient as a result of reduced costs and better service quality.

Maina (2013) states that effective FM permits trucking firms to eliminate or reduce risks related to automobile investment, increase efficiency, productivity and decrease general operational costs. FM includes activities like fuel, driver and health and safety management, truck financing, routing and scheduling, vehicle acquisition maintenance and telematics.

Ratcliffe (1987), cited by Tukuta *et al* (2011), argues that FM has to be overseen by fleet managers who are guided by a set policy. Kilasi, Juma & Mathooko (2013) further clarify that such managers must have an integrated outlook of the whole transportation activities so as to fully comprehend its effect on merchandise inventory since it plays a connective role amid the numerous stages so as to successfully convert resources into useful possessions to the eventual customer. Lai & Cheng (2004) argue that best FM requires fleet managers to avoid idle capacities which can be classified as waste. Martin (2007) goes on to state that trip planning and mileage administration are of great importance as they add benefits like proper consumption of resources, reduced wear and tear of the truck and minimised risk exposure.

Upton (2008) argues that best FM practices add value through attaining efficiency, sustainability and efficient use of resources. Much emphasis should be put on risk management so that companies will be able to cope up with disruptions, shortages and price increases rather than just focusing on day to day practices, which limit the ability to analyse and review their operational system in order to review it to be continually at par with best practices that can be defined as a methods that ensure superiority over competitors which can lead to profitability. These best practices can be achieved through benchmarking, which is the processing of looking and studying the best practices in order to attain better performance from the current one. This, combined with risk management practices assists in weighting all best practice initiative in the road freight industry (Upton, 2008, Martin, 2007)

Murray, Newman, Watson & Jeremy(2003) emphasize that many business, financial, social and legal trucking problems are due to poor fleet safety management that must be addressed to eliminate such problems. This is manifested in tight schedules that forces drivers to drive further. Drivers are also exposed to work related hazards like fatigue, poor driving, chemical hazards, poor sitting posture and vibration which contribute to frequent illness, deaths or early retirement. Some reports suggest that truck drivers have bad habits like speeding, road rage, tailgating, driving under alcohol influence, loss of concentration, use of cellphones when driving and worst lane discipline yet paradoxically they claim to be better skilled than private motorists.

It is unfortunate that trucking directors are reactionary to such practices instead of nipping them in the bud through effective driver training, safety management programs and continuous monitoring. Safety management usually makes firms to be ahead of rules and regulations while at the same time presenting entrepreneurial development, diversification and excellent customer service. This therefore raises the need for effective driver training, which Martin (2007) argues that it helps to deliver long term business benefits. However, to achieve better results, driver training need to be complimented by religiously adhering to maintenance schedules and procedures as this helps to avoid shortening of truck lifespans.

Tukuta *et al* (2011) urge that the Haulage business in Zimbabwe is characterised by gross inefficiency and incompetence in its FM which is attributed to poor routing and scheduling, driver briefing and debriefing, vehicle maintenance, fuel management and absence of truck financing reserves. They also argue that even though certain FM researches and theories did not tally because of country specific practices and challenges, haulage business performance is related to FM. Takuta *et al* (2011) also state that ineffective FM in Zimbabwe is manifested in equipment outmodedness, under capacity utilization and lack of proper vehicle maintenance; of which remedial measures are needed before the situation gets out of hand.

The effectiveness of FM can be further improved by investing new technology to have an upper hand as they will be aware of the location and movement of consignments at any given time. Similarly McKinnon (2009) also has the same view as he argues that technologies enhance better routing thereby reducing transit times and schedule deviations. At the same time it can be used to offer customers track and trace provision and also optimize asset usage monitoring distance, driving time, vehicle loading and overheads. Takuta *et al* (2011) further affirm that only the deep-rooted, business-wise steady trucking companies can afford tracking systems making smaller corporations unable to successfully manage their fleet through tracking. These deficiencies need to be eradicated through effective FM.

#### **2.4.4 Innovation**

Binsbergen, Konings, Tavasszy, &Duin(2013) define innovation as an idea, practice or object can be seen as novel by its adopters who maybe individuals or businesses. Birkinshaw, Hamel

& Mol (2008) also define innovation as the development and execution of certain practices, techniques, structures which is new and anticipated to further company goals. Innovation can be also defined as a procedure that augments value or something that can come up with a solution to a problem in novel ways (IFAD, 2005). Rodrigue, Comtois & Slack (2006) further argue that innovation is associated with quicker and more competent transport systems. Evans & Annunziata (2012) further assert that innovation remains the solitary greatest dominant component that aids to generate more with a few and ease constrictions.

Scott-Kemmis (2012) explains that the advent of new regulations, potential customers, technology and dynamic customer preferences calls for businesses to drop the ancient business models and recipes and come up with new ones that are innovative in nature and more focused. Innovation can be through learning by planning, by doing, or by studying other firms' experiences. Innovation maybe either user centred or manufacturer centred. Hippel (2005) argues that innovation that is user-centric has more advantages when compared to the ancient and traditional manufacturer-centric innovation development that had been the norm and practiced by industries for generations. The user-centric one starkly contradicts the traditional manufacturer centric innovation in which the production process was closed and secretive in nature where protections like copyrights, patents were in force to prevent imitations and freeriding on original inventions. Empirically, it seems as if nowadays users of products and services are the ones who are at the forefront in coming up with novel products and services.

McKinnon (2009) states that sequence of key managerial and technical innovations have transformed the logistics systems within the road freight movement with most of the innovations directly controlling the transport operation nature. Boer, Kuhn & Gertsen (2006) highlight the importance of innovation as a tool to improve competitiveness because it makes companies prosper in taking care of customer present and future needs. Similarly Cantarello, Martini & Nosella (2012) also support this assertion as they echo that an organisation's survival is hinged on the capacity to optimize the utilization of the prevailing knowledge with the exploration of new opportunities. Pelegrinová & Pešáková (2011) also argue that future competitiveness is founded upon innovation through new knowledge and improved

effectiveness. Innovative leadership leads to ability to make effective sense from unfamiliar situations where leaders develop a setting that applies innovative philosophy to solve problems and create novel services and products that are not reliant on known facts and past experiences. (Buchner & Horth 2014).

It is also unfortunate that, as Scott-Kemmis (2012) argues, most traditionally reputable firms appear to experience much difficulty in implementing business model innovation. This might be due to their established commitment of the current organizational business model that can effectively block innovative thinking on alternatives. Sometimes its rate of diffusion is slow as evidenced by failure by truckers to exploit new equipment and processes to their maximum potential for maximum benefits due to internal and external constraints. Unfortunately, the delicate economics of the exceedingly disjointed structure of the trucking businesses constrain innovation diffusion with the relatively big and established trucking firms that have a management that is receptive to new ideas with the aim of differentiation being the early adapters whilst the rest of the small players are trailing distantly behind (McKinnon, 2009).

Though the current dynamic trucking business environment forced trucking companies to upgrade their operations through innovation, the innovation diffusion rate can be argued to be relatively slow. The other unfortunate thing is that when new technology is adopted, its full exploitation is usually not attained. The bigger logistics firms are the early innovation adopters because of their financial muscle and the presence of a leadership that is open to new philosophies due to underlying perpetual pressure for differentiation (McKinnon 2009).

Examples of haulage transport innovations include the next generation tyre scan that raise fuel efficiency through decreasing rolling resistance on highways. Some vehicles can be fitted with automatic wheel pressure and inflation monitoring technology that can save much in terms of fuel savings and reduced wheel wear. Considerable fuel effectiveness improvements can be realized by revamping auxiliary systems through installing separate power, which in turn saves fuel. Other examples are technologies that correct poor driving habits, tracking devices, telematics, in compartment mobile computing systems that are essential for real time communication and monitoring, onboard weight sensors, diagnostic equipment, lift axles and wheels and braking retarders (Department for Transport, 2010, McKinnon, 2009). Empirical



evidence suggests that most of the truckers using telematics improved service reliability by 78%, leading to improved customer service. Telematics reduce the costs by 60% (Centro Studi sui Sistemi di Trasporto and Cranfield School of Management, 2002)

### **2.5.2 Competitiveness**

One can argue that competitiveness is one of the desires of any business establishment. Azevedo *et al* (2008) assert that encouraging competitive advantages is now the utmost imperative matter for companies in this swiftly fluctuating and uncertain business environment. Londoño-Kent (2009) further argues that to stay competitive, developing countries should invest in infrastructure that ensures carriers' requirements are met and logistics should be improved to enjoy economies of scale that lowers operational costs. The same is echoed by Raduan, Jegak & Alimin (2009) who state that realizing a commanding competitive leverage and augmenting the performance of an organization comparative to the others in the same businesses is the ultimate objective that any enterprise wishes to attain.

However, Zereilli & Cook (2010) argue that trucking business competitiveness is limited by high costs that characterize this sector as profitability in this sector is dependent upon operating costs and freight rates that are governed by demand of such trucking services, which determines the frequency of haulage trips and the utilization of such trucks by the haulage business players. All this determine competitiveness (The International Institute for Sustainable Development, 2013). The nature of the haulage business of low entry costs but high operational costs make it vulnerable to intense competition, great business failure rate and significant driver turnover. Unfortunately, the small trucking businesses that are trying to establish themselves but facing constrained capital and administrative experience are the ones that are arguably worst affected, compromising their competitiveness (Min 2013).

Hamilton (2010) adds that responsible authorities must advance strategies that encourage haulage transport business players to renew their fleets and also craft policies that encourage intermodal exchanges. Meeuws (2004) also advocates for effective legislation and regulations that regulate and monitor stakeholders in the haulage transport business like truckers, clearing agents and freight forwarders. However, much focus has to be on the firm's internal

mechanisms that can be implemented on increasing competitiveness instead of waiting for the responsible authorities to act – which may take long to be implemented.

David (2009) asserts that competitiveness can be improved by superior reliability, efficiency, effectiveness and timeliness of the trucking company since this enhances customer service superiority. However, such mechanism can be maximally effective if they are supported by optimum fleet size and optimal utilization of the established fleet. Ruske, Darkow & Reuter (2011) then add that heavy investment in ICTs is a must for a trucking firm to attain and remain competitive in the business environment that is increasingly going global. Meeuws (2004) adds training in areas like transport, logistics, financial and marketing management as requirements for competitiveness.

However, competitiveness in developing countries is affected by weak surface systems that are not competitive because of poor service-to-cost ratio. This is because of the fact that even though road transport is flexible which enables it to offer the best market value; it is very expensive in Africa in terms of ton/kilometer produced measurements because of dilapidating infrastructure (Londoño-Kent 2009). Tukuta *et al* (2012) seem to affirm the same sentiment by arguing that increasingly deteriorating and dilapidating road infrastructure is increasingly challenging Haulage businesses in Zimbabwe. The same is echoed by Mutambara (2008) who argue that Southern Africa Development Community's (SADC) transport corridors' performance show much higher costs in comparison with the world's corridors' performance. This can be attributed to low efficiency and competitive levels of the SADC region.

## **2.5 General Overview of Haulage Transportation Business**

Haulage transport business is vital as it contributes significantly to modern economies through employment as it is the chief type of cargo transport as it links supply to demand across industries in most of the developing nations. It can be argued to be the backbone of any economy as it serves, short, long, national and international destinations. It contributes significantly to the GDP, employing many as it accounts for more than 70% of freight service thereby connecting businesses (Joint Committee on Transport and Communications 2012, Londoño-Kent 2009). Ribeiro, Kobayashi, & Zhou(2007) echo the same sentiment as they

argue that haulage trucking has been developing more hastily than passenger transport. The same trend is expected in the future as urban cargo conveyance is usually carried out by trucks. Though the freight industry structure is greatly multifaceted and even though some trucking companies are performing effectively and profitably, only a few are relatively established, big with modern fleets. Londoño-Kent (2009:14) states;

*“Transport enterprises ..... Although some of these companies perform efficiently and profitably, their responsibility is poor, their financial situation shaky, their international coverage inconsistent with their trade, and their life expectancy follows the fortunes of their owners. These companies' environments fail to meet financial institutions' expectations, and their capabilities for handling large accounts are inconsistent with the requirements of modern trade.”*

Most of the vehicles have passed their lifespan, use obsolete technology that greatly consume fuel thereby becoming costly to operate and also damaging the environment. The statistically proven decrease of freight activity indicates that the trucking business environment is increasingly becoming more challenging. This decline can be attributed to the effects of the global financial crisis that affected most of the different business facets even in developing nations (Joint Committee on Transport and Communications, 2012, Londoño-Kent, 2009).

Some of the challenges include poor road infrastructure and networks, accidents, scheduling and routing, breakdowns, criminal activities, pilferage and the HIV/AIDS pandemic which is mainly affecting haulage drivers (Tukuta *et al*,2012). Poor road infrastructure is a Sub-Sahara Africa menace as it has the lowest percentage of properly surfaced road worldwide (World Bank 2009). Mouchili and Prinsloo (2008) seem to agree to this assertion as they state that African roads maintenance is heavily neglected which adds more backlog to construction of roads that are currently constructed in secluded small segments instead of interconnected systems. Takuta *et al* (2012) assessment of Zimbabwean roads notes that the roads are continually deteriorating, thereby progressively challenging trucking business in the country.

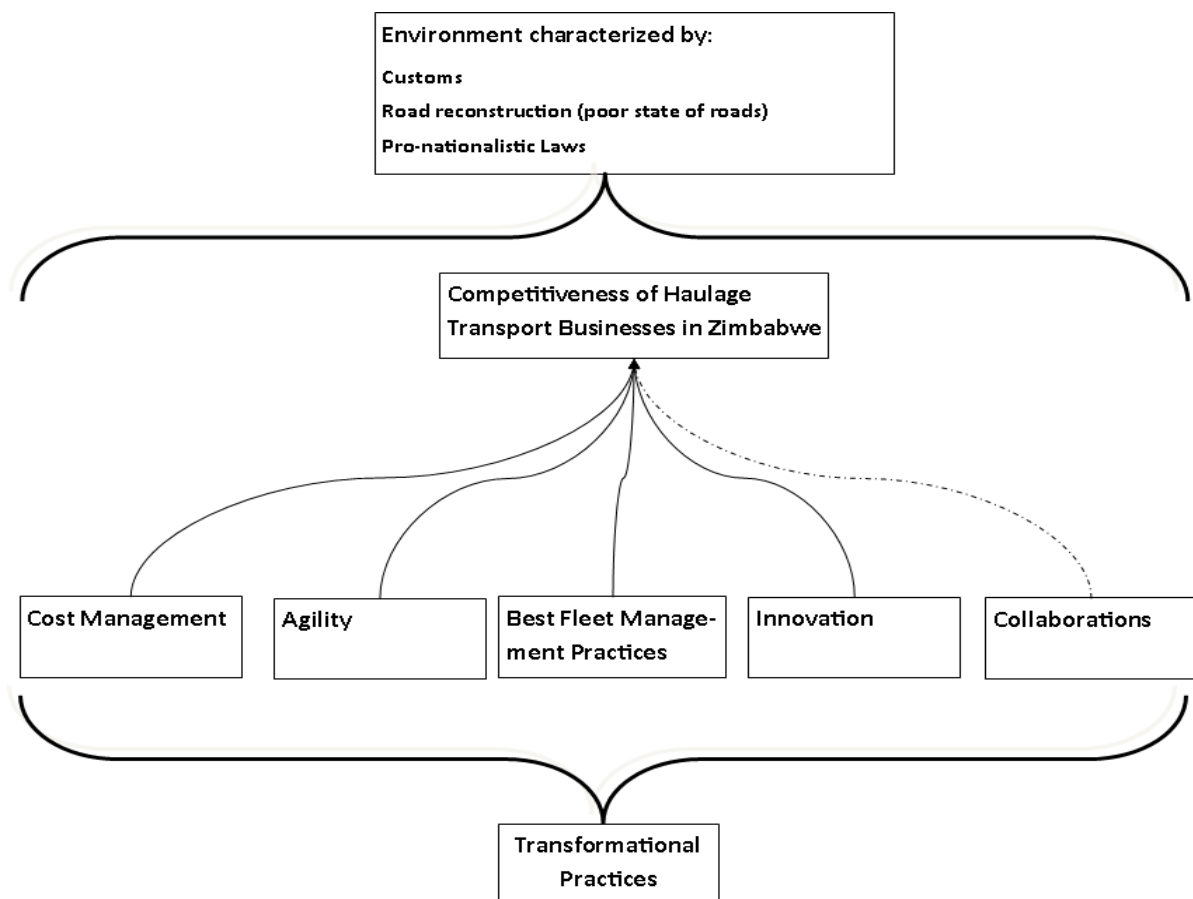
## **2.6 Gaps in Literature**

Though literature successfully covered the factors that were stated in the research objectives, existing frameworks have not mentioned an important variable (customs) that had to be considered by the researcher when doing field research. The researcher also identified some

factors that were not addressed by the literature but important enough to be considered during the field research stage. One such factor included the effect of the prevailing political environment on the competitiveness of the haulage transport sector that is characterised by pro-nationalisation laws like indigenization. The other factor that is partially addressed by literature is the effects of road rehabilitation and reconstruction on the haulage transport business in Zimbabwe.

## 2.7 Conceptual Framework

After an analysis of the present related literature, and the stated objectives, the researcher developed a conceptual framework that is diagrammatically illustrated below.



**Figure 5 Conceptual Framework**

## **CHAPTER THREE:**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter focuses on the research design, philosophy, strategy, population, sampling techniques, sources of data, the data collection procedure, data analysis, research limitations, ethics and data credibility. Because there are different research methodologies, different methods are mentioned but detailed explanation and justification is on selected methodology. The chapter ends with a summary of the chapter.

#### **3.2 Research Design**

(Kazdin, 2003) defines research design as a plan that is used in the scrutinisation of the question of interest. It can also refer to various ways used to conduct the research in order to answer the research question. It provides the outline of the actual research. Basically, it covers three aspects namely; research philosophy, research approaches and research methods. They are explained in detail below and a justification is provided for the chosen item.

##### **3.2.1 Research Philosophy / Paradigm**

A research philosophy is all about beliefs and assumptions that are vital in determining the strategy and methods to use in the research to be undertaken. These different philosophies influence researchers to study phenomena differently in terms of ontology (nature of reality) the knowledge acquisition means (epistemology). There are basically three paradigms, which are Positivism (Objectivism), Interpretivism (subjectivism) and Realism (Krauss, 2005). Positivism goes hand in hand with quantitative research, Interpretivism goes hand in hand with qualitative research and realism goes hand in hand with mixed research methods.

Positivism is primarily pure science oriented that relies on quantitative measures to come to a single pure reality by viewing the world as a one way mirror. The researcher preoccupies himself/herself with what can be observed and measured (Healy & Perry, 2000). Realism is

based on a mixture of both Interpretivism and positivism, combining the positivism view, an exclusive single reality with interpretivists multiple realities, into multiple perceptions of a solitary mind-liberated reality making it value acquainted; aware of the values of social systems and of researchers. It is in between the two philosophies (Krauss, 2005).

### **3.2.2 Analysing Interpretivism and its justification in this research**

It was developed as a response to positivism and it emphasises on the researchers' ability to create meaning. It is centred on the consideration of the person's subjective interpretations that is influenced by experiences and perceptions of the world of their minds. It therefore has its roots in the social sciences and is based on the notion that the social ontological view cannot be viewed objectively from afar but must modelled from the inside view based upon perceptions and experiences, which might result in multiple views. Interpretivism argue that single reality that crops as a result of natural sciences measurement is not applicable in social science settings where meaning has to be constructed. Therefore the aim of interpretivism is to position the researcher that s/he can comprehend, describe, and reveal social reality from the perspective of different participants with the ultimate objective of understanding rather than explaining. So reality is argued as not objective but subject to the interpretation of the individual (Mack, 2010).

This research used the interpretivist paradigm since it sought to derive meaning from experiences and expectations which produce results in many different interpretations. The researcher strived to come to a relative or contextual conceptual reality that is based on personal experiences, individual orientations that were shaped by the business environment which the haulage transport industry is operating under. It is from interpreting these experiences, perceptions, thoughts and feelings that contextual relative knowledge was created. Of the two research approaches, which are qualitative (inductive) and quantitative (deductive), the research used the qualitative one as it focused on information rich data that focuses on depth instead of breadth, conceptual instead of numerical considerations.

The research selected the exploratory study as it sought to obtain useful new insights, thoughts, opinions, experiences, and given meanings of certain events to clarify understanding of a problem. Though this research type is not conclusive in nature, it provides insights about

relations between variables. Therefore this research developed propositions that may not be tested by the researcher. Validity refers to whether the approach to measurement used in the study actually measures what it is supposed to measure (Festinger, DeMatteo & Marczyk, 2005). Reliability is defined as the degree that any procedure used to measure results is able to yield similar outcomes when repeated. In other words, it is concerned with the consistency or stability of scores in different times or under different raters. (Miller, 2012).

### **3.2.2 Research Strategy**

Quantitative research methods that follow positivism use experiments and surveys while qualitative research methods that follow interpretivism are case studies, action research, ethnography, participative enquiry and grounded theory. Quantitative based strategies have high reliability; which is the degree to which the rate of consistency is maintained in repeat trials while at the same time have low validity; which is the degree to which the instrument used measures what is supposed to measure. The opposite is true for qualitative research methods. (Festinger, DeMatteo & Marczyk, 2005, Miller, 2012)

This research used in-depth interview ahead of other strategies like case study, experiment, grounded theory; ethnography and action research because it wanted to gather deep, rich information from experts within the haulage business industry. Its costs are generally low as compared to experiments and observations. It is also less time consuming considering that the proposed research is cross sectional instead of longitudinal. It also has an allowance for views from different participants who provide rich, in depth data that is analysed to convert it to the required information. Though the importance of validity and reliability in qualitative research are highly debatable and controversial among scholars, this strategy has low reliability, the researcher opted it as it has high validity. The researcher was able to collect what he wanted to collect from the respondents. It has checks and balances and it allows clarifications on grey areas, which was ideal for the researcher. In this study triangulation was not necessary as an in depth interview was able to meet the research purpose.

### **3.3 Population and Representation Techniques**

#### **3.3.1 Population**

Festinger, DeMatteo & Marczyk (2005) define a population as every person of particular concern to the researcher. In this research, the population was composed of senior managers and directors within the haulage business sector in Zimbabwe. Since the research was primarily based on issues of policy and strategy, the population had to be composed of those at the helm of running their companies. Those were the managers and directors regardless of age, sex, race, experience or qualifications. However it was not practically possible to study the entire population, considering that this research is cross sectional of which time is limited. Studying the entire population was also costly and cumbersome to be conducted by a single researcher.

#### **3.3.2 Sampling\ Representation**

Since the research was a qualitative approach, a non-probability representation of senior managers and directors within large haulage transport business based in Harare and Mutare was used. Non probability representation methods were used in this research since they are ideal for qualitative research. Convenience sampling was mainly used ahead of judgmental\ purposive and snowballing representation. Convenience sampling is the use of participants who can be reached easily by the researcher. Judgmental \purposive sampling refers the use of the researcher's personal judgement on participants' selection instead of randomisation. In Snowball sampling, participants are recruited from colleagues' references (Festinger, DeMatteo & Marczyk, 2005, Elder 2009, Shafie, 2003).

Convenience sampling was adopted as the main sampling method for the simple reason that respondents were based in Harare and Mutare where the researcher had easy access both in physical and financial terms subject to the researcher's discretion to determine respondents in both cities who had the prospect to provide rich and accurate information. This technique was used to identify research participants who have in-depth knowledge that can greatly enrich the research study.



### **3.4 Sources of Data**

Research data are divided into two; which is primary data and secondary data. Primary data are collected for a particular research problem and the used techniques and procedures are regarded as the best for that specific research problem. Secondary data are relevant data that are collected for a different research problem that can be used to solve another research problem. Examples of primary data include questionnaires, interviews, focus group discussion, observation (participative and non-participative) and experiments while examples of secondary data include relevant databases in organization, data from literature, newspapers and other credible publications (Hox & Boeije 2005)

The research used primary data because of its originality in nature so as to afford essential data analysis that is based on data that is specific and relevant for the actual research problem. The research mainly relied on in depth interviews with the research participants. During the interviews, observation was used to a lesser extent as a means of getting non-verbal communication involuntarily expressed by the interviewees during the in-depth interviews.

### **3.5 Data Collection Procedure**

Out of the other data collection instruments like questionnaires, observation and focus groups, the researcher used interviews as they were ideal for qualitative survey which looked at depth instead of breadth. The other instruments were either not feasible or unsuitable. The in depth interview instrument made the researcher get rich data and information as the respondents were seasoned transporters who had experiences, feelings and varying opinions that were helpful to the researcher.

#### **3.5.1 Interview Guide**

The interviews were semi structured in order to cater for both standardization and variety as they provided for probing and follow-up questions. The main research questions were formulated from analysis of research objectives, literature review and the conceptual framework. Probing and follow up questions were as a result of the different responses of the interviewees. Research objectives and questions formed the backbone of the interview guide.

However, literature review also played a part in the formulation of the interview questions in the interview guide. The conceptual framework was a result of thorough scrutiny of the literature review and the research objectives. Some questions also emerged from the responses of other interviewees.

### **3.6 Data Analysis**

There are various data analysis methods in research. Quantitative data analysis methods include normality and reliability test, frequency counts, tables/graphs, cross tabulation, variance analysis, correlation analysis and regression analysis and they can be used in conjunction with packages like SPSS. Qualitative data analysis methods include thematic approach and content analysis. Qualitative softwares include NVivo, Leximancer, Ethnograph, and Knowledge Workbench.

Thematic approach was used for data analysis. Interviews, with the interviewees consent were recorded with audio recording devices. The audio recordings were then then transcribed in verbatim. The data was then coded into categorized segments so that they can be grouped into meaningful themes which lead to describing and understanding the data as an alternative for knowing the data. This, in turn read the data which helped to discover patterns and develop themes. So the researcher got familiarized to the data, created preliminary codes, looked for themes, appraised themes, defined and gave names to categories which led to the production of a final report. This approach was opted for because it provided a meaningful structure and produced rich, insightful information.

### **3.7 Research Limitations**

The field research encountered some difficulties as some of the respondents were not comfortable to be recorded on audio platform. Most of the respondents who agreed to a recorded interview accepted under protest and some even threatened legal action if the audio was released on any other platform in spite of the assurance the researcher gave to the respondents on confidentiality. In many instances, the interviews had to be cancelled after the participants refused to have interviews under audio recording.

## **3.8 Research Ethics and Data Credibility**

### **3.8.1 Data Credibility**

Qualitative research's credibility is hinged upon three related but distinct elements. The first element is the researcher's ability to gather high quality data which is carefully analysed with particular reference to reliability, triangulation and validity. The second issue is the credibility of the researcher and the third one is theoretical belief of the qualitative research's value (Patton 1999). Since there are different scholarly perceptions of the importance of reliability and validity, which is more of the consistence of research results with some advocating for its total disregard in qualitative research, concentration was more on dependability instead of reliability and trustworthiness instead of validity. Data was collected from the right people who were part of the population and there was due diligence in data verification through thorough scrutiny of matters like raw data, process notes and data reduction products.

The data collection process ensured neutrality, comfortably and consistency through the use of probing questions and verifications. However as some scholars argue, qualitative reliability is a consequence of the research's validity. Though triangulation is vital to ensure validity in qualitative research, it was not opted in this research since the research instrument (in depth interview guide) was analysed by expert academic researchers so as to rectify any shortcomings before it was used to collect data in this research (Golafshani, 2003). Variety of views was ensured by interviewing fifteen participants from different companies. Each interview was approximately forty five minutes long.

### **3.8.2 Research Ethics**

The research adhered to ethical standards and procedure during the entire research period. This was done in order to respect and avoid any harm to the participants involved in the research process and also to show respect to other researchers and users of the research. The research abode to the principles of research which are voluntary participation, confidentiality and anonymity, informed consent, potential for harm, communicating results and adherence to ethical issues. There was due diligence to avoid academic fraud, which is a deliberate falsification of what had transpired through making up data and/or results, or intentionally

drawing conclusions that were not honest in order to suit the preset research conclusions (Chambliss & Schutt, 2012)

All participants were protected through the dual principles of anonymity and confidentiality. Since the research instrument was an in depth interview, ensuring anonymity was not feasible. However, confidentiality was ensured by not disclosing the interviewee's identity (Bhattacharjee, 2012). There were mechanisms to ensure that interviewees fully understood what they were being asked to do and any potentially harmful consequences of such participation. The information provided to participants was clear so that the target group clearly understood what they were being asked to do (Kakabadse, & Kouzmin, 2002). Privacy was ensured through data protection which is the technical framework and security measures intended to guarantee that all personal data are protected from unexpected, unintended or malicious use. Collected data were kept in a protected way (European Commission, 2013).

### **3.9 Chapter Summary**

This chapter discussed and justified the selected research's philosophical approach. All the decisions to select a particular approach were justified. This research was as per the dictates of interpretivism because of the qualitative nature of the research project as the researcher was more interested in various experiences, beliefs and views so as to derive a theory. Data was collected using an in-depth interview tool while at the same time ensuring dependability and trustworthiness. The data analysis procedure was briefly discussed. Ethical issues were discussed at length so as to ensure that the researcher abode to the expected ethical considerations. The results of the data analysis are discussed in the proceeding chapter.

## **CHAPTER FOUR:**

### **RESEARCH RESULTS AND DISCUSSION**

#### **4.1 Introduction**

The purpose of this study was to analyse the transformation of business practices by Zimbabwean Haulage Transport Businesses to gain sustainable competitiveness. The study was carried out using the interpretivist paradigm since it wanted to derive meaning from experiences and expectations which produces results in different interpretations. In depth interviews were used as a qualitative research instrument. The questions in the research instrument were firstly derived from the research questions and objectives presented in chapter one, then from relevant findings in the literature review and also on issues that were raised while conducting the field research interviews. A sample in-depth interview guide is attached as Appendix One. The analysis therefore firstly addresses the respondents view on the transformational practices that ensure competitiveness, secondly the research questions raised in chapter one, then attends to other issues from the literature review and finally discusses the other issues that cropped out during field research. Most of the issues evolve around the conceptual framework that is shown by Fig 5 in chapter 2. For cross checking on coding and assessment of coded variables, please refer to Appendix Three.

#### **4.2 Representation\ Sample Description**

The field research collected data using the in depth interview instrument to fifteen respondents (R001 – R015) using a mixture of convenience, judgmental\purposive and snowballing representation methods to fifteen managers and directors within the haulage transport industry who were all males, whose qualifications ranged from diplomas to post graduate degrees. Their experiences ranged from four years to thirty six years. For further details, refer to their brief profiles highlighted in Appendix Two.

#### **4.3 Findings of the Research**

The research findings are primarily based on the research interview that was conducted to solicit for responses from managers and directors within the transport industry in line with the

conceptual framework that is presented by fig 5 in chapter two. Though the analysis is in line with the research questions, it is worthwhile to note that the issues presented in the research questions and objectives (cost cutting, fleet management, and innovation) are so interlinked that the respondents would talk about the other transformational practice while addressing a question on another variable. An example is of optimal use of machinery which can qualify under all the above-mentioned transformational practices as it would require innovation come up with best allocation of vehicles, which is a cost cutting innovative FM measure.

#### **4.3.1 General Basics for Competitiveness**

Though most of the respondents had different views on the basics of competitiveness, the general assessment is that they seemed to be in line with some transformations that were suitable for the current business environment. They are ranked as follows; service excellence, ICTs and innovation, business transformations, competent staff, modern fleet, right costing and pricing and lastly organisation's structure. Service excellence includes codes like impressive perception, service personalisation, customer service, responsiveness reliability etc. R003 actually indicated that his organisation established a name that is bigger than their organisation through personalisation of services, all time availability and readiness to avail to any customer logistics demands. He actually stated;

*“We established a name which is actually bigger than us and our current status... some of our customers believe that we are much bigger than we are....We avail our service to our customers anytime, anyhow and for any consignment.... Our role is to make sure that we move any cargo of any size. We can be called any time at night to load any consignment and we would go ahead to do that. ...You can't phone company X or company Y at night. They would say you are crazy. We can receive calls at night and we will respond accordingly and we are available 24\7”*

ICT and innovation were also mentioned as vital for sustained competitiveness in the transport sector. Issues discussed by R006, R007 and R010 include leasing out idle premises for other businesses, flexibility and real time information gathering and analysis which is part of tracking and tracing. R005, R007 and R008 emphasized on business transformations that needed the abandoning of traditional business practices and embracing of change so as to gain competitiveness. R005 and R008 respectively stated;

*“My opinion is that the company is still stuck in those old practices when they had traditional customers like xxxx. Some of those companies are even no longer in existence. Our model is still based on that when the traditional customers are in the mainstream in doing business but is not the existing situation. So I feel that there are things could be actually be transformed in our company to improve competitiveness”*

*“Competitiveness is in how you run and perceive the business and the ability to change. Most transporters lag behind in change. They can't change because they used to do that same thing last year and it gave them money ... yet the environment is changing... When you can adapt that change you don't have to wait for that change to happen. .... you don't have to wait to effect change when you are at the apex. You must change within the period of apex and remain competitive. So the mind has to be changed. The Zimbabwean mind is still lagging behind... Change will give you that tip over..... , if you drive around you will see some trucks parked and their chances of ever getting back on the road are zero because they did not acquire the necessary skills. If they did acquire the necessary skills they failed to use those skills to bring in a competitive edge and new brains. I am old school, there are new things like cellphones, computers, they are being adapted but some are still living yesteryear. So those in my view will fall and they are falling because then the management style is not conducive to the environment, you can't survive without fresh ideas”*

The structure of the organisation was also mentioned as vital for sustained competitiveness. R006 emphasized on rightsizing and R009 attributed the structure as a product of the company's age and size. The other factors mentioned as vital for competitiveness like competent staff, modern fleet and right costing and pricing are discussed in detail under transformational practices.

#### **4.3.2 Transforming Practices**

In this particular section, analysis was done in as per the order of the research questions so as to adequately answer the stated research questions. These research questions were centred on the four transforming practices which are cost management, agility, best practices to fleet management and innovation. Analysis of collaborations, which emerged during literature review also followed soon after the research questions order.

#### **4.3.2.1 To what extent does cost management ensure competitiveness of haulage businesses in the Zimbabwean economy?**

As R005 stated “*Cost is actually the dividing line between a failure and profitable company, we are always watching at our cost even as departments....*”, the importance of this transformation agency is of great importance. This transforming agency had five basic sub-themes which are ranked in order of occurrences as follows; effectiveness, innovation, cost cutting, IT and lastly training and development.

Most of the respondents were convinced that effectiveness, which includes; optimal use of available resources, multiskilling, standardisation, planned scheduled servicing, driver monitoring and new fleet are the best measures that can ensure competitiveness as it implies the optimal use of available resources to produce optimal results. R009 highlighted on standardisation as a cost cutting measure as there will be uniform pricing. R001 emphasised on ensuring effectiveness in resources so as to reduce costs. This same sentiment was also shared by R003 who stressed on multiskilling as a measure of ensuring that all members of staff were all-rounders who could do various tasks so that they could replace anyone who leaves the organisation or go on leave without hiring anyone. R012 stressed that planned scheduled servicing is more cost effective than waiting for a vehicle to breakdown and be repaired as it can cost a lot of money especially if it breaks down in far from the garage. R008 argued that small things that might be overlooked like tyre, fuel management can make a big impact on cost management while R014 underscored the importance of driver monitoring as he stated;

*“Drivers can be monitored to avoid vehicle abuse eg he can transport a wardrobe for personal business and add \$20 to his pocket while at the same time adding 30 kilometres to the mileage. So if 20 drivers do the same in one day it means 600 kilometres added per day translating to 60 litres of diesel.....”*

Though the innovation sub-theme is a standalone transformation practice, it cuts across these practices earlier mentioned. It is also mentioned by respondents as an effective cost management measure. R001 suggested practices that bridges middlemen such as to buy directly from the manufacturer so as to minimize costs. R004 and R007 seemed to agree on innovations that ensure travelling times that reduce costs for example, avoiding midday



driving that leaves tyres prone to blow outs because of excessive heat and also avoiding night driving which increases the risk of accidents. R006 also suggested of subleasing of premises that are no longer optimally used as a cost cutting measure. His argument was that instead of leaving premises idle or operating at a rate below the breakeven point, subleasing such premises would avoid such costs. R007 also alluded to robbery and hijackings that usually affects vehicles travelling to South Africa as one of the major cost drivers of the trucking industry; he then suggested travelling in convoys as a security measure that reduces such costs. All these sentiments highlight the importance of innovation as a cost-cutting measure.

Another sub-theme that falls under this transformation practice is the actual cost cutting. R001 talked of quick disposal of obsolete fleet that is costly to operate. R010 also had the same sentiments as he argued that it is better to acquire new vehicles instead of second hand vehicles as they are expensive to maintain. Another important measure that was advocated by R001 and R004 is benchmarking costs with other companies in the same industry so as to compare the costs of their company *vis a vis* the costs of other companies. R005 nailed it on cost cutting as he talked of implementation of cost cutting measures like forced leave of personnel when business declines. He actually states;

*“So we are always watching our costs even as departments ...We actually told our departments to do a predictive analysis of what business could actually be and try to tell us what we are going to do. All managers agreed that in January business will be low, so we asked managers of their plans to mitigate that low business. Some are even planning to send staff on forced leave, park some vehicles...”*

Another alluded cost cutting measure was consistent restructuring so as to ensure competitiveness (R006). R010 emphasized on reduction of unnecessary staff costs such as ensuring process quality to reduce claims and overtime.

Respondents also emphasized on the use of ICTs as a sub-theme that works as a cost management measure as it reduces labour costs if implemented and it can also monitor costs in real time cost monitoring (tracking and tracing) that provides for real time response to ballooning costs as compared to the historical costing that has limited real time response. R011 stated that IT can prevent pilferage as it can go a long way in quickly detecting any of these undesired practices as he states that *“...not all of our employees are actually trustworthy...”* R005 seemed to agree with this by even arguing that Close Circuit Television

(CCTV) can monitor even untrustworthy customers who can do unethical things during transactions; he rightfully states it as he says;

*“We have seen some customers in peak periods, they give you some freight and when you are busy and not watching, they take back their freight to his vehicle and tomorrow he says that look here you signed, can I have my TV or laptop. But with CCTV you can prove to him what happened. So all these are actually meant to cut costs....”*

The last cost management sub-theme is training and development that helps the companies to reduce costs due to staff motivation, empowerment and perfection. R001 and R004 had the sentiment that driver training is a vital cost cutting measure as it ensures that drivers drive in a way that reduces costs. R013 rightfully added driver education to driver training as he argued that drivers should appreciate the ripple effects of careless driving. According to him;

*“The biggest cost that can be the most important component on the vehicle is the driver. He is the main determinant of costs. If he is properly trained, he doesn’t drive over curbs or tin cans and risk destroying the tyre that costs more than \$400 which in most cases will be the gross profit. So you need to employ a professional driver who is well trained and understands the costs aspects not driving only. Simple basic teachings are necessary for drivers for them to appreciate the costing involved through reckless driving as everyone from the Managing Director to a sweeper is affected by a damaged tyre which can drive us out of business”*

#### **4.3.2.2 How critical is agility effective in guaranteeing competitiveness of the haulage business in the prevailing economic conditions in Zimbabwe?**

In most instances, the researcher had to explain the meaning of agility to the respondents as it seemed to be a new term to them. However, the respondents quickly understood its meaning and responded accordingly after the explanation. Though most of the respondents agreed that agility is vital for sustained competitiveness, four respondents had somehow different views. R002 argued that agility is not important as proper planning will cater for everything and eliminate surprises. R011, whose business was struggling, shockingly admitted that he had nothing to do with agility and he had no hope of ensuring sustained competitiveness except to hope for a miracle in the economy. R015 accepted that agility was difficult to maintain because of the traditional nature of businesses that did not cater for agility. R005 also seemed to agree with R015 in the difficulty of being agile, especially to big companies, as he argued;

*“Our company is actually a very big company; it is a very big snake, so you would understand that the rate of turning of a very big snake or an elephant is actually very slow. But still we agree that agility is a key success factor in terms of competitiveness. But in a company as big as ours, we would actually have to transform a lot more than a small company. Naturally our company has to start from the top leadership; the transformation has to start there”*

Responses that appreciated the importance of agility as a transformational practice were grouped into two themes which are; quick response to changes and new trends, ranked in order of frequency of occurrence. The “quick response to changes” sub-theme mainly included flexibility, evolving adoption to the environment characterized by queer dynamic customer demands, global changes, and alertness. The organization has to put in place mechanisms for seamless recovery from any unpredictable change it may face. R004 argued that failure to meet those customer demands automatically means that you are out of business. R006 was spot on when he explained different areas where agility is needed that included labour costs and fuel fluctuations, evolving global trends, vehicle specifications and queer customer demands that summarizes what was mentioned by R008, R010, R012,R013 and R014. According to R006;

*“The market is highly competitive but the same time highly unpredictable in terms of the trends and needs of the customers in one bracket and also things like some of the cost elements are changing. Today, fuel is \$1,50 but tomorrow it will be \$1,56 . Labour costs are also changing. ... but in most cases what is happening is that most of the clients are coming with queer demands. You have to actually change and suit them. .... we had a specific type of vehicles that we were using ... and the vehicle specifications changed drastically, we had to purchase completely new equipment. So definitely you have to be very agile or else whatever you have becomes obsolete overnight. In our case, most of our clients are international organisations, so whatever happens in their mother countries, they try to implement it in Zimbabwe. So we have to be flexible. If there is a new safety related development, we have to realign whatever they are doing to their demands”*

R007 mentioned of alertness as he argued that for an organization to survive for a long time it need to be alert for any changes that affect the transport industry. He even argued that the trends nowadays are focusing on the safety of equipment and staff and customers are also equally concerned with those trends as they are also demanding those requirements as preconditions for doing business with them. R008 also emphasized on the importance of

agility as a precondition for competitiveness of which without it, you will face some difficulties. According to him,

*“Agility is just nimbleness, it ensures quick and seamless recovery or taking part in any activity. Agility now..... increases competitiveness because of flexibility. Without it in the movement of goods, you will not be able to achieve what you want to achieve”*

The other sub theme generated by this transformation practice is adoption of new trends that include use of multi-use trailers, conversancy with procedures, elimination of idle time, outsourcing and ICT. R004 stressed on the need for continual conversancy of customs evolving procedures so as to avoid delays at borders. R007 seemed to agree with R004 as he elaborated that such conversancy would reduce, if not eliminate idle time at borders, which enhances productivity and competitiveness. R008 and R009 also argued that agile organizations should embrace new practices like outsourcing services and use of ICTs. R003 rightfully spelt it out as he gave an agility example of multi-use of trailers so as to ensure competitiveness. According to R003; *“We also have containers in order for us to containerize whenever the need arises and also to revert back to break-bulk when the need also arises”*

#### **4.3.2.3 Do best practices to fleet management lead to sustained competitiveness of haulage business in the Zimbabwean business environment?**

As R002 rightly argued on the importance of best practices in FM *“...the more you can control your fleet, the better you can go out there and offer better products, .... then you can actually tell where trucks are spending their time, how can you change your practices and how can you be better than the other guys.”* Just like him, all respondents agreed that sustained competitiveness is also hinged on FM transformations. This transformational practice had three sub-themes which are effectiveness, ICTs and vehicle repairs & maintenance as ranked in order of occurrence.

The effectiveness sub-theme codes included effective fleet allocation, standardization, modern equipment, effective scheduling, optimal vehicle usage, zoning, driver training, fuel and tyre management, route monitoring, standalone FM department, and minimising vehicle abuse.

R002, R005, R006, R007 and R010 emphasised on efficiency through correct fleet positioning, scheduling, allocation and utilization for optimal vehicle usage. This, if achieved guarantees competitiveness through optimal FM practices. According to R002;

*“FM also plays about 60% because that is where your planning starts ... When you plan; you are planning for your future. So you are now trying to figure out what you have in your workshops, why is it there, are there reoccurring problems, how are you tracking your fleet, so you know what trucks are where and at what time, are you sending the right trucks for that load”*

R005 also shared the same sentiment as he argued;

*“In a transport industry, you basically have two main assets, which are the Human Resources and the fleet with the customer being the 3rd one. So FM it is the only other physical asset that you make a profit from”*

R013, like R002 talked of proper FM planning so as to ensure competitiveness. R001 argued that managers should be operationally minded so as to ensure the best FM practices. R011 emphasized on fuel and tyre management as he explained that proper tyre pressure would ensure long tyre life, which in turn enhances competitiveness. He even advocated for reduction of idling time as some of it is unnecessary and detrimental to the fleet effectiveness. R003 stated that some clients demand that FM operations fit to the dictates of set standards and only deal with transporters who are ISO certified by the Standards Association of Zimbabwe. So he argued that standardization of FM is effective in attaining competitiveness. R010 argued that nowadays, FM can to a larger extent gain sustained competitiveness of the company has a modern fleet that is fully optimized for it to be effective. At the same time R005 even alluded to a stand-alone FM department whose sole responsibility is to concentrate on FM so as so ensure optimal fleet utilization in order to realize sustained competitiveness within an organization. However, R006 nailed it by giving an example of effective FM that can be implemented to attain sustained competitiveness. According to R006;

*“We try to optimize vehicle usage and get the best out of it. ... at our organization, all cities in have been grouped into zones . One particular vehicle has to be allocated a particular zone according to location and traffic conditions. In the CBD we try to put smaller vehicles and also if you look at the type of cargo its only smaller parcels. In the industrial areas we put in heavy vehicles, it’s easy to maneuver and the freight is also big because we say that is where the manufacturing guys are .... If we are to look at the trunking vehicles that do intercity, we try to optimize them. Instead of having a*

*situation of one trailer and one horse, we have more than 200 trailers and less than 50 horses being used. If it gets to Bulawayo from Harare at 9pm, at 5am it is in Bulawayo, the driver rests and another driver takes it to Chiredzi with another trailer, then another driver takes it from Chiredzi to Harare. So it gains more mileage in 24 hours through utilizing it to the maximum. ... When a full load comes into Harare, it is unhinged and another horse takes it to a delivery point. That horse leaves it there whilst it is being offloaded, that same horse goes to a client where a trailer has been dropped earlier and goes and collects that other trailer it has left”*

The other sub-theme is the adoption of current ICTs as a FM measure so as to attain sustained competitiveness. Most respondents opinionated that ICTs are vital for tracking and tracing as it provides real time feedback to the driver, manager and the client. So it improves communication between the driver, manager and the client. It also helps to detect and prevent pilferage, theft, poor driving habits and vehicle faults. R009 stated that IT helps in FM as it does optimal vehicle routing and scheduling, driver allocation and scheduled service rosters. R004 and R008 respectively had this to say on tracking and tracing;

*“... tracking systems, which monitor trucks make it easier for me to control the vehicle from any point... drivers can stop at beer halls and spend a lot of time drinking, with the tracking I can quickly notice weird stops and I can phone the driver and ask him to give a full explanation. It also enables me to monitor the cargo and communicate the client soon the whereabouts of the cargo instead of phoning the driver. I can even advise the client to prepare for the cargo if it is close to the delivery point”*

*“... I have introduced the computer fuel usage analysis to reduce pilferage by reporting siphoning and my tracking devices can also report over speeding, freewheeling, and improper vehicle handling etc...”*

Another generated sub-theme under this transformational practice is “optimal vehicle repairs and services” that is made up of codes like scheduled servicing, regular inspections, meeting set standards, third party inspections and physical checks. R001, R007 and R008 emphasized that regular servicing and inspections is of great importance and even though the economy is shrinking, servicing must not be compromised as others are doing because such a practice will be costly in the long run. R001 and R008 respectively had this to say on regular scheduling and inspections;

*“We introduced a schedule for truck servicing.... a service schedule and we introduced a system that replaced the old system of waiting for drivers to bring defects for trailers and trucks. Now we have a schedule that includes all the major things and we don’t have to wait for drivers to bring defects of a breakdown. What we do we just look at the number of kilometers and time so that we can call for the service. So there is an inspection sheet that we have designed. It is done regularly when each and every truck comes and leaves. So when it comes a checklists is used to check the truck when the truck is discharged, another person also checks everything ... like quality checking. We have quality control system whereby someone has to check what have been done and not done after someone”*

*“The best FM is your services; which should be done instead of repair work. Failure to service greatly damages the vehicles through reduced viscosity, which can result in damage to engines. Here I introduced E Service every year where we park the vehicle and service from bumper to bumper where we service, remove replace, recondition vehicle components and this gives us 12 months of normal run. Even though the vehicle might have some problems, they will be limited because we would have done our part. We also do periodic oil analysis checks with laboratories who may tell us of engine defects that can be identified before the damage escalates. This reduces costs because most of the things are planned and have ample time to put mechanisms to rectify the situation... You can even do physical checking at any given time to look for discrepancies”*

R003 explained that some clients even do third party inspection of fleet and premises before awarding contracts to transporters, so vehicles have to meet their minimum standards in order to get business that enhances sustained competitiveness. The same is shared by R001 who explained that even in mines in neighboring countries, a vehicle is inspected by the client before it can be allowed to carry their loads and ever since they introduced regular servicing and inspections, their vehicles meet those set standards. R006 also highlighted that they had their own workshop so they try by all means to be strict in terms of servicing so that they don’t have much in terms of repairs.

#### **4.3.2.4 What is the importance of innovation in ensuring competitiveness in the prevailing economic environment of Zimbabwe?**

R007 underlined the importance of innovation by rightfully arguing “... *because transporters are becoming more and more and goods are becoming fewer and fewer. A good manager or company should actually look for ways of how to improve access of loads*” Any academic may need no further explanation after understanding the deep meaning of this statement. This transformational practice generated three sub themes from the participants’ responses which

are presented in order of number occurrence as follows; outwitting competitors, new trends and need of financial backing.

The out-witting competitors sub-theme had various codes that included offering more, continual research, proper planning, time management, differential new ideas, accessibility, access to loads that are scarce, speed, outsourcing, specialization, limited delays, diversification and offering unique products. R013 stressed on diversification which is a vital innovative aspect that ensures survival that produces unique products though he admitted that it is difficult to come up with successful innovative products. According to him;

*“I have actually talked of diversification ... to use our existing competences to enter other industries. .... the industry which we are in, the kind of product which we deal with, for us to actually come up with something that a customer would say **“Wow this is what company X has already done”**.... We have tried to do that ... we tried to go to tobacco farmers to say we will carry your tobacco from your farm right up to the auction floor, there was a massive response. We also tried to take groceries to rural areas but it failed. So as a company we realize that though we have to come up with unique products, ... in an economy like ours, it is actually very difficult”*

R012 argued that having a specialized department that deals with certain types of loads like hazardous substances can help to concentrate on innovation in transporting such products. R008 contended that outsourcing of services like out of station minor repairs is also an innovative practice that ensures competitiveness. He also talked of speed in delivery as he argued that only those who move quicker can survive. R006 and R007 argued that only those with innovative ways to have access to scarce loads are the ones who remain competitive in today's Zimbabwean environment. R003 and R005 seemed to share the same sentiments as they argued that continual research is vital for differential ideas that offer more than just a transportation service.

The new trends sub-theme had codes like networking, use light trailers, ICTs, new methods, services and processes, consolidation of loads and tracking & tracing. R002 explained that an innovative use of a light trailer ensures either less fuel usage or more net load to the horse.



R006, R014, &R015 emphasized on IT use that provides for tracking & tracing, accessibility and minimum delays. According to R006;

*“Innovation is key, we are in the ICT age..... ..Usually the one who is easily accessible is the one who gets business. ...we introduced freightware, which is an operating system that provides for track and trace benefits instantly. You can also get online proof of deliveries. .... You get all the information that you want as quick as possible.... instant information access for the client. So it eliminates delays and loss of documents. Our tankers use ADR compliant, such trucks can be connected to a computer system, it provides the weight of the vehicle, fuel, volume, gravity, density everything. Clients like xxx demand ADR compliant vehicles. So if you are not innovative enough and not catching up with the current trends you will be left behind. People think that transport is just movement from point A to B but a lot of things happen in the background”*

R007 also mentions of consolidation as an innovative measure in this tightly competitive environment. He explains that instead of waiting for a traditional full load from one customer, the company may get small loads from different customers, store them briefly in a warehouse till they can make a full load that can be than transported to the intended destination. R009 emphasizes on new methods that go hand in glove with globalization in order to stay in business. R008 had a vital innovative new trend of networking as a competitiveness enhancer. He rightfully explains it as follows;

*“As business I have set up such a network where if I have any minor repairs in any one town, I have response within a short time using outsourced services. That is innovation, when you become innovative, then everything else ....when something happens, you already got an answer or you can get an answer much quicker just because your mind have been trained to look at the unexpected and you are innovative”*

However, some respondents (R001, R005 &R010) argue that some innovation is difficult to come up with and implement and also require strong financial backing. According to R005;

*“I understand it as the ability to come up with perhaps new ideas in the form of projects in our industry. Those would actually be services that are probably able to place the company out in front of the others. So the problem with that in our industry is the nature of our product. No matter where we may try to innovate, what a customer wants from us is the ability of transporting goods from point A to B. So it becomes difficult to modify our product in the sense of product innovation. Yes we may actually co-opt things like the internet, tracking and tracing, customer care centers, but all*

*those are just an extension of the product. What the customer wants is movement of products from point A to B in the time that he wants. So that tends to limit us....”*

R001 also had this to say;

*“... we promote innovation but the problem at the moment is finance, you can't innovate without finance. At the present moment, the current situation in Zimbabwe, you might have ideas or anything to do with innovation but if you don't have money, you cannot achieve it...”*

It is worthwhile to note that mostly, financial backing was mainly on technological innovation which is highly capital intensive. The other types of innovation may not require huge amounts of money.

#### **4.3.2.5 How do collaborations ensure sustained competitiveness of the Zimbabwean Haulage Businesses?**

This transformational practice emerged during literature review and was incorporated to the transformational practices that are needed for sustained competitiveness of Zimbabwean haulers. The respondents viewed it as critical for competitiveness as emphasized by R003 who argued;

*“Collaboration is a very important aspect, in my view, let's say I have 20 trucks, I can subcontract my colleague who has 10 trucks, to run a contract that requires 30 trucks for our benefit... It creates competitiveness and gives you extra revenue at low costs because we use someone else's rigs. So those from Gweru call on us to give them loads at lower rates back to Gweru we make some money because we will not run our own trucks. Before we had our own trucks we were doing transport broking only.”*

Though nearly all of the respondents appreciated its importance, most of them discussed of its forms and the challenges that have to be first overcome for it to be effective in sustained competitiveness. This transformational practice generated three sub-themes from different codes. These sub-themes are; forms of collaboration, challenges to collaborations and lastly benefits of collaborations.

The main forms of collaborations that were discussed were outsourcing, cooperatives and subcontracting. Mostly, sub-contracting was seen as ideal (R001, R003, R004 & R005) as it benefited those who did not have the capacity to meet the contract and those who had the extra capacity but with no contracts. In sub-contracting, both the sub-contractor and the sub-

contracted benefit because they would both realize some revenue from situations where they would not have realized in the absence of that arrangement. R004's argument was appropriate that:

*"... the client may want to move his product within a week and I have no capacity, I have to subcontract someone to help me move the products. In that way we are always helping each other. It also avoids empty running because I might have traditional clients to one city but with no product to transport from that city. So I can liaise with other transporters so that he can provide me with backloads for our mutual benefit"*

R007 & R015 had an idea of cooperatives like what is done by haulers in South Africa who make consortiums of different truck owners whose administration is done at a consortium office under one name like what Rixi Taxis once did in Zimbabwe. According to R015;

*"An example is the South African UTI Transporters whose trucks are owned by different people, the trucks are run by control office and everyone follows certain protocols on how you do things, same tracking system. It's all uniform. The only person that knows what is what is the Control Office"*

R003 & R010 also alluded to outsourcing as a form of collaboration which might be beneficial to the interested parties. R010 explained that the advantage of outsourcing in haulage business is that you actually utilize your strengths while at the same time choosing other organisations that have got strengths on your weaknesses thereby achieving competitiveness.

Though collaborations were viewed as vital, some respondents (R002, R006, R008, R009, R011 & R014) mentioned some hurdles that have to be cleared first before it can be very effective for sustained competitiveness. This sub-theme was generated from codes like; implementation difficulties, branding problems, issues of privacy, individualism, improper branding and culture harmonization. R002 actually argued that Zimbabwean haulers are actually very far from achieving collaborations as most of them had different business cultures that are different to fuse into a single culture. He also argued that even if you subcontract someone, he may go to the client with a truck that has completely difficult colours,

logos and specifications from your trucks that may affect your relationship with your clients. He rightfully argued;

*“It is working elsewhere but low in Zimbabwe, because we have that mentality of individualism. If you cross the borders you won’t see those funny names trucks. If I buy two trucks I am now Jati Trucking and I want to paint a baboon on my trucks for everyone to know. Now if someone has 6 trucks that are clean and run properly, if he wants to add my baboon trucks to make them, He might hear his customers saying if you want to load at his yard, he doesn’t want to see that baboon truck. The only collaboration that can be done in Zimbabwe is only if the guys take away their unpopular brand and form proper cooperatives with trucks of the same colour, .... The drivers having same uniform and manners.... the customers can respect that fleet. So if you have 60 trucks like that, you can now compete with company X. But if you have 60 trucks of different colours, you cannot compete with established companies. Before anything can be done that monkey behavior of transporters has to be taken away through training level from the owners and management before you get to the drivers because culture has a role to play. So if the owner of the trucks has a wrong culture, you can guarantee that the driver has a wrong culture too”*

R004, R011 &R014 seemed to argue that what makes collaborations difficult to implement is because of lack of proper planning and the conflicting issue of company privacy as some companies are not comfortable to collaborate with others because they fear that the sub-contracted companies may grab future businesses from their traditional established companies. However, R009 admitted that if there is proper planning, aided by proper contracts, professionalism, harmony, and spirited effort by stakeholders, these hurdles can be cleared to make the environment conducive for collaborations.

The last sub-theme, which is benefits of collaborations, was generated from codes like economies of scale, information sharing, combined lobbying, backloads, and attractive rates. R002 argued that one truckers form consortiums, they can use their numbers for cheap bulk purchase since they would have muscles to flex when bargaining for low prices of inputs. R010 and R011 explained that collaborations can help to have access to backloads so as to prevent empty running because the availability of backloads automatically means an attractive rate to the client. R007 explained that there is need for collaboration as it helps in information sharing and combined lobbying of haulers’ interests. According to him;

*“... some of the problems we are encountering not only as a company but as transporters are as a result of lack of collaboration. So there is need for collaboration. Though we are competitors we still need to collaborate on certain issues for example we can blacklist a problematic driver within our fraternity for our benefit. We can collaborate on certain issues ... through lobbying to the local authorities or ministries... Regionally we can also collaborate on issues like customs clearance and others...”*

### **4.3.3 The Zimbabwean Operating Context**

There were some issues that were specific to Zimbabwean haulers that were not adequately covered by literature under literature review. This research sought to also look at these issues during fieldwork. These issues are customs hurdles, pro-nationalistic laws and the state of roads in Zimbabwe. Each specific issue is discussed in detail below

#### **4.3.3.1 Do customs procedures play in the pursuit of sustained competitiveness of Zimbabwean haulers?**

All of the respondents who were into cross border transportation agreed that customs hurdles are affecting their competitiveness, especially the turnaround times. R004, R006 and R009 respectively expressed concern on such hurdles as they stated;

*“We are also affected by clearance procedures because at time trucks are affected by physical examinations whereby trucks are offloaded at borders to physically check the goods. So this delays trucks at the borders. Only if Zimbabwe Revenue Authority (ZIMRA) can use latest technology that scans and detects goods without physical checking, efficiency would be improved on our part”*

*“There is going to be customs hurdles especially in a country like Zimbabwe, you know how it is, they want to maximize on everything”*

*“... there are a lot of delays and by this you won't be in a position to achieve competitiveness. The cause of this is lack of competent people at the border, they are slow and there are power blackouts and also at the moment some civil servants are not being paid. They are on “go slow” ....”*

Two sub-themes were generated from this operating environment; which are clearing obstacles and solutions. The clearing obstacles sub-theme was generated from codes like clearing bureaucracy, multiple clearing offices, long turnaround times, corruption, travelling restrictions, obsolete technology. R001, R002 and R011 lamented the clearing bureaucracy

that they claimed that they were characterized by multiple clearing offices from different authorities. These multiple offices, as argued, affect border times because of different offices as opposed to one stop clearing office. However, R002 and R011 argued that the present scenario makes it impossible for a one stop office because of mistrust on accountability of revenues between these authorities resulting in them resorting to individually collect their own levies and taxes.

R015 also lamented on obsolete technology used by ZIMRA that forced them to sometimes physically offload and inspect some trucks. Such practices, he argued, affects turnaround times and creates unnecessary congestion. R010 and R003 also argued that customs delays results in lengthy turnaround times which affects sustained competitiveness as some clients may avoid Zimbabwe. R005 bravely talked of corruption at the border, which was not expressly mentioned by others. He argued that at one time his company was forced to post an employee at one busy border post so that he would facilitate bribes so as to ensure limited delays at the border. He boldly argued that though it was an unethical practice, trying to stick to ethics would badly affect competitiveness as the truck would be delayed to the maximum. R004 also lamented of some restrictions by agencies like Environmental Protection Agency (EMA) on certain types of loads that are considered as hazardous to be transported at certain times. All these hurdles, as argued by respondents seemed to affect their competitiveness.

The solutions sub-theme was generated from codes like lobbying, pre-clearing, harmonization and adequate conversancy. Most of the respondents were convinced that pre-clearing of goods was an alternative measure to mitigate customs hurdles. However, they argued that not all loads can be pre-cleared, some have to be cleared when the truck gets to the border. R001, R005, R012 and R014 argued that transporters must join forces and lobby the government and other stakeholders on issues like customs harmonization, one stop clearance, adoption of current technologies, reduced bureaucratic protocols and preclearance of all goods.

#### **4.3.3.2 How Zimbabwean haulers can ensure competitiveness while operating on bad roads that are currently being reconstructed?**

Generally, all respondents appreciated efforts to rehabilitate some major roads but they expressed dissatisfaction over the state of roads in Zimbabwe which are still very far from aiding to sustained competitiveness. Actually, they argued that the state of roads is negatively affecting their competitiveness. R002, R004 and R006 respectively explained this undesirable situation;

*“... now some transport companies are avoiding Zimbabwe and running through Botswana etc. So what then happens is we have less business coming through the country for the truckers to pick up. Because we are in the SADC, we want to be able to run to Zambia with a load and then come back from Zambia and SA with a load, but because our road network is bad we lose business”*

*“.... Road infrastructure has to improve as roads affect us, our competitiveness and efficiency because we send our truck for one day and it returns back to the workshops for repairs”*

*“... Sometimes the costs of going there outweigh the benefits of going there. We had a lucrative contract to transport coke ore .... everything we got there was wholly channeled to repairs ...”*

This contextual variable generated two sub-themes which are the negatives and mitigations sub-themes. The negatives sub-theme was generated from codes like accidents, high vehicle maintenance costs, blacklisting of certain routes, lengthy transit times, delivery retiming and high toll fees. Most of the respondents were concerned of the high maintenance costs due to increased wear and tear caused by poor state of roads. They also highlighted that such roads leave their vehicles exposed to high probability of accidents due to tyre bursts, mainly caused by big potholes. R003 commended the government’s efforts to rehabilitate some roads but argued that the rehabilitation priority was questionable because most economically active roads that are mainly used by cross border truckers were awarded a low priority whilst roads that had a little economic significance were awarded a high priority. R012 mentioned of lengthy transit time due to bad roads. At the same time R013 also alleged that the high toll gates fees negatively affected sustained competitiveness because they can gobble up to \$100 for a back trip from Harare to Bulawayo.

The mitigation sub-theme was generated from codes like slow speed, driver training and development, route diversion, day driving only, route monitoring, rescheduling and blacklisting of certain routes. Some respondents like R001 and R014 were not innovative enough to suggest any solutions except to wait for the roads to be rehabilitated to a better state. According to R001; *“So at the company level, there are no solutions. It’s a national problem that government has to look into and solve the problem”*

However, most of the respondents suggested some mitigation practices that can be embraced to enable them to remain competitive till the roads are completely rehabilitated. R004 and R007 stressed on driver education and monitoring to make sure that they navigate carefully when driving on those routes so as to minimize rapid wear and tear. However, R004 had more of a consultative and educative approach of discussing with the drivers the benefits of slow maneuvering of trucks on such routes to both the driver and the company in the long run. R007’s approach was more on restrictive and punitive measures like ensuring adherence to set speed limits that are below the national speed limits and the imposition of day driving only. R009 suggested delivery of goods to a point where the road becomes inaccessible and the sub-contract non-motorized carriers like scotch carts to deliver such goods to the final destination. R005 and R010 talked of route monitoring so as to divert their routes in order to avoid certain routes even though the resultant route would be a bit longer. R008 had a similar but somehow more radical approach of blacklisting certain routes whose costs would outweigh the generated revenue as he argued;

*“There are some roads that I would not allow my truck to travel ..... So sometimes the roads determine where we go or not go. If the roads are slippery, it’s better not to go because the chances of losing your vehicle there are high. It would be folly to lose 3 tyres for an \$800 load. Even the rate is triple; some routes are out of bounds because you can lose the whole truck, a truck can get stuck there and the cost of hiring a crane may be exorbitant so you will have to dig into previous profits or borrow to recover that vehicle”*



#### **4.3.3.3 How Zimbabwean haulers can ensure competitiveness in the presence of pro-nationalistic laws?**

There was a mixed reaction on this issue as some were saying they are not affected since they are indigenous companies, some indicated that they were affected and others claimed that such laws were easy to evade so there were not much of a threat to competitiveness. However, most of the respondents criticized those laws from the general economic perspective with less emphasis on the haulage transport sector. One striking inconsistent view was mentioned by R002 who claimed that pro-nationalistic laws had no effect of haulers' competitiveness. According to R002;

*“Such laws haven't spread to the transport industry ... they always put in their documentation and their paperwork. But I am still to hear of any transportation company that was affected by this policy. There are no controls that I know of, transporters have got free reigns of their fleets, and most of them have got mixed fleets. The problem with trying to bring in that law in the transport industry is you won't affect that transporter. If they do that, they just sell their trucks and just buy South African trucks. Zimbabwe is part of SADC; they can still run their trucks through Zimbabwe. This is why you see Zimbabweans operating trucks from Zambia, they can still load from SA and deliver to Congo and drive through Zimbabwe”*

However, their existence cannot be disputed as all other respondents admitted that such laws are being enforced even to the haulage transport sector and have even looked for measures to glide around such laws so as to remain competitive.

This operating environment had three sub-themes that are; the negatives, the positives and adoption strategies. The negatives sub-theme was generated from codes like lack of service support, no FDI, inhibits competitiveness and political hooliganism. R003 and R009 argued that such laws affected FDI and the general economy as such laws stifle investment; which is detrimental to the economy. They argued that the haulage sector cannot be spared from such a predicament. Below is what R009 and R003 respectively argued;

*“The transport sector is affected by politics. These affect competitiveness to a greater extent. This is because we are saying we are supposed to have capital and for us to have capital, we need FDI but no one can do that in the investment conditions are made unfavorable due to those pro-nationalistic laws. This is why we sign a lot of deals that are not materializing”*

*“These laws have stifled investment. I have seen a bit of both a good and a bad economy. This environment is bad. We believe that certain policies have stifled to*

*industry so that transporters are affected. We can't move anything. So we believe that certain policies have destroyed the industry"*

R001 had a similar but slightly different perception from the above views as he argued that such laws have affected the after service support industry for truck and equipment suppliers. This situation, he argued, affects Zimbabwean haulers because no one is willing to bring own companies for credit and service support. R010 argued that indigenization favors indigenous transporters who have old fleet without adequate service which inhibits competitiveness. R011 was very skeptical about such pro-nationalistic laws. His argument was that such laws only benefit political hooligans who only prey on what others have established. R006 also expressed displeasure that even though their company is fully indigenized, some clients, especially the civil service still perceive it as not indigenous enough, leading to loss of business opportunities. Lastly, R003 expressed reservations on the structure of such policies that are share based when he actually proposes that they should be tax based so as to help indigenous people transporters to open their own companies instead of seizing other people's established companies. According to R003;

*"..the best way is to allow investors to come and then you start a taxation system instead of a percentage system. Even if you bring a guy who doesn't share the same vision, ideology and you are forced to work with him is problematic because my vision is not his vision. So the indigenization policy should be a tax system. An indigenous bank should be established and those foreign companies should pay tax to that bank so that indigenous people would go and apply for funding from that bank and start their own indigenous companies not to go into existing companies"*

On the second sub-theme of the positives of such laws, only two codes, which are easy evasion and rectification of imbalances, made up this sub-theme. As previously argued by R002, the transport sector can easily evade such laws. However R008 seems to contradict R010 as he argued that such laws are ideal as they correct longstanding imbalances in the trucking sector. According to R008;

*"Most of the big contracts are awarded to the white boys, they get the big contracts and the indigenous tend to get the peripheral business. I have a non-indigenous guy who has a small office, no vehicle but gets big contracts who then sub contracts us. The non-indigenous people actually control the majority of contracts. This is a sad*

*situation. On the other hand I tried to form an alliance of blacks to get together and speak with one voice but it was difficult to do that because they seemed to be reluctant”*

The third sub-theme, which is adoption strategies, was generated from respondent's suggestions that formed codes like corporate marriage of conveniences, looking for sub-contracts, employee share ownerships and tailor-made proposals. R005 hinted that his organization had a corporate marriage of convenience with an indigenous company so as to comply with such laws and remain competitive. R006 and R007 also suggested negotiating for sub-contracts with indigenous companies that would have got contracts so as to keep their noses above the water and also ensure visibility. R008 and R009 suggested of considering employee share ownership so as to both comply with the requirements of such laws and also to ensure that both management and workers realize that it is their company and will work tirelessly for it to remain competitive and profitable.

#### **4.3.4 General Closing Discussions**

The discussions in this sub-topic look at some interview closing remarks of the respondents. Their remarks managed to generate three sub-themes; which are lobbying, general transformations and South Africa problems. However the first two sub-themes are more of a repetition of what was discussed before. Hence, this section only concentrates on the last sub-theme, which is South Africa (SA) Challenges. These challenges were brought forward by R003 and R006 who regretted the challenges that affect Zimbabwean haulers' competitiveness. These challenges are mainly attributed to the operating environment that is tilted in favour of SA truckers. R006 was not impressed that South Africa truckers enjoy economic benefits that give them an edge over Zimbabwean truckers. He further argued that even though there might be some measure to combat this worrying situation, not enough can be done to fully outwit SA truckers since their economy is conducive for low business overheads. According to him;

*“We are also suffering because of our proximity to SA and SA truckers are coming into the market offering better rates than ours. We are actually under pressure from foreign competitors. What we realize is that the reason why the foreign guys are up there is because they have better fleet. It looks as if it is expensive when purchasing it but it's actually cheaper to maintain. So we are buying new fleet too. In terms of fuel,*

*there is nothing we can do at the moment because its government controlled. So we cannot match that”*

R003 gave a much detailed explanation as he explained that the set environment has systems that favour SA truckers. Below is his detailed argumentative explanation.

*“Economically this country must start create a proper Balance of Payment as it will also ensure competition in this region. We are suffering because every piece of material and food the sit on our shelves comes from SA and we can’t directly transport that cargo, we are given that cargo through brokers as opposed to SA companies because they prefer SA transporters because they give this excuse that if they give business to a Zimbabwean transporter their Revenue Authority states that once I create CD4, the goods should leave the country so if the give a Zimbabwean transporter some business and he doesn’t export the goods, the revenue Authority will demand the tax of those goods. So in order to guarantee that the tax is paid they have to give business to SA companies who they can trace if any complication arises. But those SA truckers do not face that problem in Zimbabwe because they can easily get businesses from Zimbabwe to SA. So the Zimbabwean transporters are left in the open. The industry should ensure that the government has a system that any cargo that comes into Zimbabwe should be carried by Zimbabwean transporters. So those are the dynamics and at the end of the day we are outwitted by the South Africans who dominate our market with the cargo, trucks and on our own cargo that is transported out of our country”*

#### **4.4 Key Findings**

##### **4.4.1 General Basics for Competitiveness**

The common view among respondents was of the adoption of practices that are suitable to the current environment so as to attain competitiveness. Most of the codes go hand in hand with what is needed in the current environment so as to achieve that desired competitiveness. This is also in line with literature, which stresses the importance of service excellence that is viewed as a new paradigm which entails setting up minimum standards that set minimum acceptable standards that can be used for benchmarking compared to world class standards by mainly concentrating on customer service and insight, quality of service delivery, consistency and access to information. Its definitive goal is to attain competitiveness through anticipation of the end user needs so as to guarantee customer satisfaction, which calls for operational excellence. This calls for the integration of the whole business system to achieve service excellence (The National Department of Tourism, 2010, Blachier & Jadoul, 2010).

#### **4.4.2 To what extent does cost management ensure competitiveness of haulage businesses in the Zimbabwean economy?**

The respondents agreed that cost management is vital for sustained competitiveness and should not be overlooked but businesses should actually transform their practices so as to align their costs to be minimal, so as to operate in tandem with the dictates of the current business environment. These findings seem to agree with literature that state that proper and effective cost management can result in substantial cost savings and while at the same time improving service delivery and realizing low unit costs, like cost per mile, trip or hour (Burkhardt & Levi 2005). Al-Iryani & Gassin (2005) also argue that trucking companies have to aim to discover the best optimum delivery arrangement that yields the most optimal level of service quality at the bottommost possible budget to the organisation which then calls for an organisation to seriously scrutinise cost drivers, which are activities and factors that pushes up costs so that they can have a better appreciation of the cost structure for better business forecasting.

#### **4.4.3 How critical is agility effective in guaranteeing competitiveness of the haulage business in the prevailing economic conditions in Zimbabwe?**

The study revealed that though some respondents argued that agility is difficult to implement, most of the respondents underscored the importance of agility as a critical factor to ensure competitiveness in the trucking business' sustained competitiveness. This is in line with literature, which argue that the recent Global Financial Crisis and recurring market instability has ignited many companies to move towards agility in the way they manage, lead and structure their organisations (Chandler Macleod, 2010, The Economist 2009). This trend has led to a new business paradigm in response to volatile markets and changing customer preferences and tastes as agility is more of flexibility, swiftness and speed (Sanchez-Rodrigues, 2006). Christopher (2000) also emphasises that the company's degree of complexity relating to its trademarks, services and products, how it is structured and managed can hinder its implementation of agility.

#### **4.4.4 Do best practices to fleet management lead to sustained competitiveness of haulage business in the Zimbabwean business environment?**

The general key finding is that best FM practices ensure sustained competitiveness of the haulers in Zimbabwe. There is therefore a need to ensure that best FM practices by haulers are

adhered to so as to gain sustained competitiveness. Failure to do that can surely be a recipe for disaster as FM is the backbone of haulage transport business operations. These sentiments are in line with literature as argued by Kilasi, Juma & Mathooko (2013) who stress that managers must have an integrated outlook of the whole transportation activities so as to fully comprehend its effect on merchandise inventory since it plays a connective role amid the numerous stages so as to successfully convert resources into useful possessions to the eventual customer. Upton (2008) argues that best fleet management practices add value through attaining efficiency, sustainability and efficient use of resources. So enhanced fleet management assists to improve efficiency of the supply chain by reducing transport costs and at the same time warranting timely delivery of the right product at the right location (Takuta *et al* 2011, Kilasi *et al* 2013)

#### **4.4.5 What is the importance of innovation in ensuring competitiveness in the prevailing economic environment of Zimbabwe?**

In summary, it can be argued that innovation is vital for sustained competitiveness as alluded to by most respondents even though it may be difficult and sometimes costly to implement. Literature seems to agree with the above findings. Cantarello, Martini & Nosella (2012) argue that an organisation's survival is hinged on the capacity to optimize the utilization of the prevailing knowledge with the exploration of new opportunities. Scott-Kemmis (2012) also argues that companies can establish themselves through renewed growth to attain competitiveness through innovation. This is so because innovation invokes an exploration of novel pathways through experimentation that results in sustainable competitiveness (Mitchell & Coles, 2003). Rodrigue, Comtois & Slack (2006) explain that a transport innovation, when combined with new technology regenerates the affected mode to be more competitive. So if a trucking company embraces new technology, that innovative process can yield competitiveness.

#### **4.4.6 How do collaborations ensure sustained competitiveness of the Zimbabwean Haulage Businesses?**

The study findings can reveal that collaborations are lacking even though they are ideal for sustained competitiveness of the haulage business in Zimbabwe. The discussion clearly exposed some collaboration shortcomings that have to be rectified for sustained

competitiveness of the Zimbabwean haulers. Literature seem to argue along the same sentiments as Peeta & Hernandez (2011) argue that collaborations can result in survival of companies in that competitive industry operating under unstable business environments characterized by volatile fuel prices. Collaborations therefore optimize capacity utilization through avoidance of empty trips and the more the collaboration, the more the capacity utilization. The same is echoed by Agarwal & Ergun (2008) who argue that such innovative collaborations like synergies lead to efficiency within the whole system which can lead to reduced costs, reduced lead times, increased equipment utilization and better sales levels. O'Reilly (2005) also argues that research indicates that many players in the freight industry are resorting to collaboration as a means of increasing profit margins that are already very slim. Collaboration then act as a catalyst to improve competitiveness.

#### **4.4.7 Do customs procedures play in the pursuit of sustained competitiveness of Zimbabwean haulers?**

It can be generally summarized that custom hurdles are affecting the Zimbabwean haulers and there is little that companies can do to individually address such issues as they require joint efforts from transporters to lobby the relevant stakeholders to address their issues. Some literature support this assertion as it states that trucking business is affected by congestion at the borders. One can safely argue that this is a liability as it can take even two days for haulage trucks to be cleared at the borders resulting in very high opportunity costs. (Parliament of Zimbabwe, 2014)

#### **4.4.8 How Zimbabwean haulers can ensure competitiveness while operating on bad roads that are currently being reconstructed?**

On the whole, it can therefore be summarized that though the state of roads is not ideal for sustained competitiveness of the Zimbabwean haulers and rehabilitation priorities are not in favour of roads with much haulage traffic, the transporters can be innovative enough to ensure sustained competitiveness even when the roads are very bad and currently being rehabilitated at a slow pace. Literature seem to agree to these findings as there are also claims that poor road infrastructure is a Sub-Sahara Africa's menace as it has the lowest percentage of properly surfaced road worldwide. It is also argued that African roads maintenance is heavily

neglected, which adds more backlog to construction of roads that are currently constructed in secluded small segments instead of interconnected systems (Prinsloo & Mouchili, 2008). Tukuta *et al* (2012) assesses Zimbabwean roads as continually deteriorating, thereby progressively challenging trucking business in Zimbabwe. This is further corroborated by Parliament of Zimbabwe (2014), which notes that unfortunate bad road condition contributes to accelerated deterioration of trucks.

#### **4.4.9 How Zimbabwean haulers can ensure competitiveness in the presence of pro-nationalistic laws?**

The research findings reveal that pro-nationalistic laws to varying extents affect Zimbabwean haulers' competitiveness and the Zimbabwean truckers have to be innovative enough to look for ways to remain competitive under such an environment. The mixed reaction to such laws highlights the need for a balance between indigenization and FDI to ensure sustained competitiveness.

#### **4.4.10 General Research Interview Closing Discussions**

In summary, it can then be argued Zimbabwean truckers face a serious problem of being outwitted by SA truckers. This also tends to affect their sustained competitiveness because of the operating environment that appears to favor SA truckers. This assertion needs further research on its impact on sustained competitiveness of Zimbabwean haulers.

### **4.5 Chapter Conclusion**

This chapter framed the findings of the study and it has been found that though the Zimbabwean economic environment is not conducive for Zimbabwean haulers, some transformations in business practices can ensure competitiveness of such haulers under such an environment. These practices are agility, cost management, best FM practices, innovation and collaborations that can help Zimbabwean haulers gain sustained competitiveness in an environment characterized by customs hurdles, pro-nationalistic laws and bad state of roads that are being rehabilitated.



## **CHAPTER FIVE:**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This study set out to analyze the transformative business practices in the Zimbabwean Haulage Business Sector in order to ensure sustained competitiveness in the dynamic economic environment. The basic proposition is that business practice transformations like cost management, agility, best fleet management practices and innovation are critical for haulage transport businesses to attain sustained competitiveness in the prevailing Zimbabwean economic environment. The main research instrument was an in-depth research interview that was administered managerial participants in the haulage transport sector. This chapter concludes what was discussed in the research findings and comes up with policy, managerial and general recommendations that can help the haulage transport sector to attain sustained competitiveness. The research acknowledges that few studies have been conducted with specific reference to the Zimbabwean Haulage Transport Sector competitiveness. It is hoped that the research recommendations will help this sector to adopt and fine tune their business and operation practices and models that ensure sustained competitiveness. This chapter also highlights the research limitations and areas of further study.

#### **5.2 Conclusions**

The conclusions address the specific research objectives and questions presented in the first chapter of this report, issues that arose from the literature review as portrayed by the conceptual framework and lastly some issues that unfolded during the field research. Though itemized conclusions are presented below, the main conclusion is that even though the operating environment is not ideal for competitiveness of the Zimbabwean haulage businesses, those that are able to transform their business practices are the ones who can attain sustained competitiveness in the current Zimbabwean economic environment. Below are the itemized conclusions of the research.

a. Most of the basics that are essential for competitiveness such as service excellence, ICTs, innovation, business transformations, competent staff, modern fleet, right costing and pricing and restructuring are to a larger extent modern practices that are actually transformative practices that ensure sustained competitiveness of the Haulage Transport Sector. These sentiments can be viewed as valuable as they call for adoption of such practices by the haulage sector in order to attain sustained competitiveness. The haulage transport sector has to heed to these suggestions as failure to do can be argued to be a recipe for disaster.

b. Cost management is vital for sustained competitiveness and should not be overlooked but businesses should actually transform their practices so as to align their costs to be minimal so as to suit to the dictates of the current business environment. Certainly, the respondents' are essential because cost management is vital for determination of profitability that leads to competitiveness. So this calls for the Haulage Transport businesses to innovatively monitor and manage their costs in a way that ensures sustained competitiveness.

c. Though agility can be argued to be difficult to implement, it is very critical as it implies quick response to new trends. This is a vital precondition for sustained competitiveness for the haulage transport sector in Zimbabwe. This implies that companies that fail to be agile will also fail to be profitable. In the end, they will fail to gain sustained competitiveness in the Zimbabwean dynamic and shrinking economic environment.

d. Best FM practices ensure sustained competitiveness of the haulers in Zimbabwe. From an analytical perspective, the respondents rightly explained the need to ensure that best FM practices by haulers are adhered to so as to gain sustained competitiveness. Failure to do that may have unfavourable consequences given that FM is the backbone of haulage transport business operations. This therefore calls for haulers to tune to the dictates of the best FM practices as explained in the discussions presented in chapter four.

e. Innovation is vital for sustained competitiveness as alluded to by most respondents even though sometimes it may be difficult and costly to implement innovative measures to the Zimbabwean haulers. In spite of these assertions, the findings stress the importance of innovation as it calls on Zimbabwean haulers to implement innovative measures in order to attain sustained competitiveness. This is besides the clear fact that most businesses are operating under an unfavorable environment. Innovation ensures that the firm is well ahead of others.

f. Collaborations are lacking even though they are ideal for sustained competitiveness of the haulage business in Zimbabwe as the respondents clearly exposed some collaboration shortcomings that have to be rectified for sustained competitiveness of the Zimbabwean haulers. This prevailing situation obviously implies that Zimbabwean haulers are losing sustained competitiveness opportunities that are embedded in collaborations. This calls for Zimbabwean Haulers to come up with collaboration measures so as to competitively operate in such an economic environment.

g. Custom hurdles are affecting the Zimbabwean haulers and there is little that companies can do to individually address such issues as they require joint efforts from haulers to lobby the relevant stakeholders to address their issues. As the respondents rightfully stated, the haulers in Zimbabwe have to join hands and rigorously engage various stakeholders and authorities so as to ensure a conducive customs environment that ensures competitiveness. Failure to do so will also result in failure to minimize the handicaps caused by such hurdles.

h. Though the current state of roads is not ideal for sustained competitiveness, haulage transporters can be innovative enough to implement some measures that ensure sustained competitiveness even when the roads are very bad. These correct sentiments from respondents call for the Zimbabwean haulers to stretch their operational tactics so as to remain competent in the current operating environment. Failure to do so results in them continually bemoaning

the poor state of roads while hoping for quick rehabilitation, that may finally come to pass after those firms have closed businesses due to failure to gain sustained competitiveness.

i. Though there are some pros and cons of pro-nationalistic laws' affects Zimbabwean haulers' competitiveness, the cons seems to outweigh the pros. However, the Zimbabwean haulers must strive to attain sustained competitiveness instead of waiting for the laws to tilt to their favor as this may take long to come to fruition. This calls for haulers to be innovative enough to look for ways to remain competitive under such an environment.

j. The regional operating environment favors SA truckers. This negatively affects sustained competitiveness of the Zimbabwean haulers. This calls for Zimbabwean haulers to transform their business practices so as to be in tandem with global transport and logistics trends, while at the same time building synergies and lobbying the responsible government ministries to strategically to create a level playing ground for all haulage transporters within the region.

### **5.2.1 Answers to research questions**

Some of the above-mentioned findings clearly address research questions presented in chapter one as highlighted below.

#### **5.2.1.1 To what extent does cost management ensure sustained competitiveness of haulage business in the Zimbabwean economy?**

The research revealed that cost management to a greater extent ensures sustained competitiveness to Zimbabwean haulers since costs are a determining factor between profit and loss. If they are improperly managed and not at par with current trends, they can erode attained profits thereby negatively affecting sustained competitiveness. The opposite is true.

#### **5.2.1.2 How critical is agility effective in guaranteeing sustained competitiveness of the haulage business in the prevailing economic conditions in Zimbabwe?**

The research revealed that agility is a critical new trend that has to be embraced by Zimbabwean truckers so as to guarantee sustained competitiveness since businesses need to be nimble, flexible, respond and adapt to prevailing trends and be at par with the prevailing competitive dictates in a Zimbabwean dynamic economic environment.

#### **5.2.1.3 Do best fleet management practices lead to sustained competitiveness of haulage business in the Zimbabwean business environment?**

The research revealed that since FM is the backbone of haulage operations, it has to be executed with due diligence so as to implement best measures that lead to sustained competitiveness. This is done through use of current ICTs, effective vehicle repairs and servicing and optimal use of equipment to produce more with less.

#### **5.2.1.4 What is the importance of innovation in ensuring sustained competitiveness in the prevailing economic environment of Zimbabwe?**

The research revealed that innovation is very important in ensuring sustained competitiveness for Zimbabwean haulers as it ensures effectiveness through producing more with fewer resources while at the same time outwitting competitors to attain sustained competitiveness. So those companies that are innovative in nature are the ones who can have access to loads and manage to transport them optimal costs that produce optimal gains that lead to sustained competitiveness.

### **5.3 Research Proposition Validation**

From the discussion of the research findings and the research conclusions, it can be safely argued that the main proposition that business practice transformations such as cost management, agility, best fleet management practices and innovation are critical for the Haulage Transport Businesses to attain sustained competitiveness in the prevailing Zimbabwean economic environment. However, the research findings also revealed that collaborations also form part of transformational practices that are essential for sustained competitiveness in an operating environment characterized by pro-nationalization laws, poor road infrastructure that is undergoing reconstruction, customs hurdles and an operational

environment that favors SA truckers. The research objectives were met as the research managed to explore cost management measures, analyse the effects of agility, determined best FM practices, and evaluated the importance of innovation to Zimbabwean haulers so as to attain sustained competitiveness.

### **5.3.1 Contribution**

The study extends an analysis of transformational practices that are essential to the Zimbabwean Haulage Transport Sector in order for it to gain sustained competitiveness. It highlights the need for Zimbabwean haulers to incorporate practices like agility, cost management, innovation, and best FM practices so as to attain sustained competitiveness. It also contributes to an understanding of the implementation of such practices in the Zimbabwean environment, which is characterized by customs hurdles, pro-nationalization laws, poor state of roads and increased competition from South African truckers, an area where there is a dearth of research. The study therefore raises crucial matters in transformational practices that are necessary for sustained competitiveness of Zimbabwean truckers.

## **5.4 Recommendations**

Following the above mentioned conclusions, recommendations that are in line with the conclusions are made to Zimbabwean Haulage Transport Businesses who wish to attain sustained competitiveness in the dynamic Zimbabwean economic environment they operate under.

### **5.4.1 Policy Recommendations**

Even though Zimbabwean haulers have to transform their businesses for them to operate under an unfavorable environment, below mentioned are some policy recommendations that can fast-track competitiveness of the haulage transport businesses in Zimbabwe:

- a. The Zimbabwean haulers should come together and lobby the Government and Zimbabwe Revenue Authority to realign customs laws and practices so that they become harmonized and ideal for sustained competitiveness of haulage transport businesses.

b. Though the haulers should look for ways to get the best out of the unfavorable state of roads, they should lobby the responsible authorities like Zimbabwe National Roads Administration and Ministry of Transport and Infrastructural Development to speed up road rehabilitation and give preference to routes that have more haulage transport volumes.

c. The responsible authorities like the Ministry of Youth Development, Indigenisation and Empowerment must ensure that pro-nationalization laws have to be balanced so as to ensure both FDI and empowerment of indigenous haulage businesses. This will ensure that the haulage transport sector attains sustained competitiveness.

#### **5.4.1 Managerial Recommendations**

Various managerial recommendations are brought out by this research study. They are highlighted below.

a. Zimbabwean truckers should transform their businesses from traditional practices to suit new trends and dynamics that presently characterize the environment they operate in so as to attain sustainable competitiveness through service excellence, ICT & innovation, abandoning old practices and restructuring.

b. Zimbabwean haulage transport businesses should constantly manage and monitor their costs while at the same time look for innovative measures to reduce costs so as to attain sustained competitiveness in the Zimbabwean economic environment through innovation to produce more with less, implementing cost cutting measures, use of IT and staff training & development.

c. Haulers must be vigilant enough to be agile so as to quickly react to any changes; whether expected or unexpected so as to attain sustained competitiveness in the economic

environment they operate under through quick identification and response to change and also quickly familiarizing with new trends and quickly adopting them in their business operations.

d. Zimbabwean truckers should continuously ensure that their FM practices are the best to warrant the lowest operational costs since FM is the backbone that directs and supports haulage transport operations. This is done by ensuring effectiveness in their operations by ensuring optimal resource utilization through multi use of horses, optimal scheduling, use of relevant IT and periodic planned vehicle repairs & maintenance.

e. No matter how difficult it is to implement innovative measures, for Zimbabwean haulers to survive, they should continually be innovative like differential new ideas, services and processes, diversification and unique products so as to find ways to adequately satisfy the customer cost-effectively. This ensures attainment of sustained competitiveness.

f. Even though the haulers are competitors in the same business, they should also use collaborations that work to their advantages for them to attain sustained competitiveness in this dynamic Zimbabwean economy through abandoning individualism. Collaborative measures like cooperatives, subcontracting, information sharing and combined lobbying will lead to improved business.

## **5.5 Study limitations and Suggestions for Further Study**

### **5.5.2 Study Limitations**

The study used an interpretivism paradigm that used qualitative methods with an in-depth research interview as a data collection instrument. Though this approach has room for in depth data gathering, it lacks variety as the participants are few compared to a positivist paradigm that has room for variety. A study on the same topic using a quantitative approach can help to come out with conclusions that can be generalised.



### **5.5.2 Suggestions for Further Study**

It is suggested that the problem of losing competitiveness to South African truckers cited by Zimbabwean truckers because of systems in place that tend to favor South African haulers should be studied in detail so as to provide recommendations to Zimbabwean haulers on strategies that they can put in place to ensure sustained competitiveness on their part and also a create a level playing ground. The other areas that also need further study are in the areas of customs hurdles, poor state of roads and presence of pro-nationalization laws.

## REFERENCES

Africa Monitor 2012, 'Economic Outlook', Africa Monitor.

Africa Monitor 2014, 'Economic Outlook', Africa Monitor.

African Development Bank Group 2012, Infrastructure and Growth in Zimbabwe: An Action Plan for Strengthened Recovery, African Development Bank, Abidjan.

Agarwal, R & Ergun, Ö 2008, 'Ship Scheduling and Network Design for Cargo Routing in Liner Shipping', *Transportation Science*, vol 42, no. 2, pp. 175-196.

Al-Iryani, &Gassin, 2005, 'Logistics and Transport Management: Deciding a Distribution Network Design: Varying from Centralized to Decentralized Pattern', Master Thesis, School of Economics and Commercial Law, Göteborg University.

Aparicio, J, Llorca, N & Sancho, J 2009, 'Cooperative Logistics Games', Dept. of Engineering of Industrial Systems., Center of Operations Research, University Miguel Hernandez of Elche.

Arayapan , &Warunyuwong, P 2010, 'Logistics Optimization: Application of Optimization Modeling in Inbound Logistics', Master Thesis Work, School of Innovation, Design and Engineering, Mälardalen University, Sweden.

Arvis, J F 2005, 'Transit and the Special Case of Landlocked Countries', *Customs Modernization Handbook*, 2005.

Atkinson, SR 2005, *The agile organization: From informal networks to complex effects and agility*, Command and Control Research Program, London.

Azevedo, SG, Ferreira, J &Leitão, J 2008, 'The Role of Logistics Information and Communication Technologies in Promoting Competitive Advantages of the Firm', *The Icfai University Journal of Managerial Economics*, vol VI, no. 3, pp. 7 - 21.

Barni, N 2013, 'Global Security: Freight Rate Innovation', *Cargo Network Services Corporation*.

Berwick, M &Farooq, M 2003, 'Truck Costing Model for Transportation Managers', Upper Great Plains Transportation Institute: North Dakota State University, North Dakota.

Binsbergen, AV, Konings,Tavasszy, &Duin, V 2013, 'Innovations in intermodal freight transport: Lessons from Europe', TRB 2014 Annual Meeting, Delft University of Technology.

Birkinshaw, , Hamel, &Mol, J 2008, 'Management Innovation', Academy of Management Review, vol 33, no. 4, pp. 825–845.

Blachier, &Jadoul, 2010, 'Increasing Competitiveness through Ongoing Operational Excellence', Strategic White Paper, Alcatel-Lucent.

Boer, H, Kuhn, J &Gertsen, F 2006, 'Continuous Innovation: Managing Dualities through Co-ordination.', CINet, CINet.

Buchner, D &Horth, D 2014, 'Innovation Leadership: How to use innovation to lead effectively,work collaboratively, and drive results', White Paper, Center for Creative Leadership.

Burkhardt, J & Levi, S 2005, 'Seniors benefit from transportation partnerships:', Case studies from the aging network. (Prepared for the Administration on Aging, U.S. Department of Health and Human, vol 1.

Burmaoglu, S &Harun, S 2001, 'Analyzing the Dependency Between National', Journal of Competitiveness Logistics Performance and Competitiveness: Which Logistics Competence is Core for National Strategy?,vol 3, no. 4, pp. 4 - 22.

Calvo, R, Domingo, R & Sebastian, MA 2007, 'Systemic criterion of sustainability in agile manufacturing.', International Journal of Production Research, vol 46, no. 12, pp. 3345-3358.

Cantarello, Martini, A &Nosella, A 2012 , 'A Multi-Level Model for Organizational Ambidexterity in the Search Phase of the Innovation Process', Creativity and Innovation Management, vol 21, no. 1.

Centro Studi sui Sistemi di Trasporto and Cranfield School of Management 2002, 'A Survey of Telematics Use by', Transport and Logistics in the Digital Era European Freight Operators.

Chandler Macleod 2010, 'Organisational Agility - Navigating the Maze', Chandler Macleod Group.

Christ, N & Ferrantino, MJ 2009, 'Land Transport for Exports: The Effects of Cost, Time and Uncertainty in Sub-Saharan Africa', Office of Economics Working Paper, U.S. International Trade Commission, 2009-10-A, Washington, DC.

Christopher, M 2000, 'The agile supply chain – competing in volatile markets', Industrial Marketing Management, vol 29, no. 1, pp. 37-44.

Christopher, M & Towill, DR 2000, 'Supply chain migration from lean and functional to agile and customised', Supply Chain Management: An International Journal, vol 5, no. 4, pp. 206 - 213.

David 2009, The Management of Commercial Road Transport in Ethiopia, Addis Ababa Chamber of Commerce and Sectoral Associations, Addis Ababa.

Department for Transport 2010, 'Innovation Secures Future at Rural Haulier', Case Study, Department for Transport, North Berwick.

Elder, S 2009, ILO school-to-work transition survey : A methodological guide, International Labour Organization, Geneva.

European Commission 2013, 'Smart, green and integrated transport', HORIZON 2020 – WORK PROGRAMME 2014-2015, European Commission.

Evans, C & Annunziata, 2012, 'Industrial Internet: Pushing the Boundaries of Minds and Machines', General Electric Co.

Festinger, DeMatteo, & Marczyk, 2005, Essentials of Research Design and Methodology, John Wiley & Sons, New Jersey.

Frost & Sullivan 2011, 'Mobile Solutions Boost Fleet Performance and Profitability', White Paper, Frost & Sullivan, Mountain View.

Golafshani, N 2003, 'Understanding Reliability and Validity in Qualitative Research', The Qualitative Report, vol 8, no. 4, pp. 597-607.

Goriwondo, W, Mhlanga, & Mutsambwa, T 2013, 'Agility for Sustainability in Zimbabwe: A Case Study for Manufacturing Companies in Bulawayo ', Zimbabwe China-USA Business Review, vol 12, no. 1, pp. 38 - 51.

Grasil, O 2009, 'Professional Service Firms: Business Model Analysis – Methods and case studies'.

Gunasekaran, A, Lai, K & Cheng, TCE 2008, 'Responsive supply chain: A competitive strategy in a networked economy', Omega, vol 36, no. 4, pp. 549-564.

Hamel, G & Välikangas, L 2003, 'The Quest for Resilience', Harvard Business Review, vol 81, no. 9, pp. 52-63.

Hamilton, BA 2010, 'Dakar – Bamako Cost of Transport Analysis', USAID.

Hassan, A, Bakar, A, Yusof, N, Awang, A & Adamy, A 2011, 'Survival strategies of construction companies in malaysia during two periods of recession', International Journal Of Academic Research, vol 3, no. 4, pp. 481 - 486.

Healy, M & Perry, C 2000, 'Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm', Qualitative Market Research – An International Journal, vol 3, no. 3, pp. 118-126.

Highsmith, J 2009, 'Agile Project Management: Creative Innovative Products'.

Highsmith, J 2013, 'Adaptive Leadership: Accelerating Enterprise Agility', White Paper, ThoughtWorks, Chicago.

Hippel, EV 2005, Democratizing Innovation, The MIT Press, Cambridge.

Hox, JJ & Boeije, HR 2005, 'Data Collection, Primary vs Secondary', Encyclopedia of Social Measurement, vol 1, pp. 593 - 599.

IBM 2012, 'Cutting through Complexity with Business Agility: Enabling change, innovation and strategic directives— faster and smarter', Thought Leadership White Paper, IBM Global Business Services, IBM Global Business Services.

IFAD 2005, 'Innovation Strategy', IFAD, Rome.

IMF 2012, 'IMF Country Report No. 12/279 Zimbabwe 2012 Article IV Consultation', International Monetary Fund, Washington DC.

Ittmann, & King, 2010, 'The State of Logistics – an overview of logistics in South Africa', Since Real and Relevant Conference, Pretoria.

Jenkins, IA 1999, 'All change - New directions for the road transport industries of Russia, Ukraine, Kazakhstan and Belarus', Transport Reviews, vol 14, no. 4, pp. 289-320.

Kalathil, A 2009, 'Maximizing Supply Chain Performance in the Transportation and Logistics Industry', Cognizant, 2009.

Kazdin, AE 2003, 'Methodology: What it is and why it is so important', in AE Kazdin (ed.), Methodological issues and strategies in clinical research, 3rd edn, American Psychological Association., Washington DC.

Kearney, AT 2000, 'Insight to impact: Results of the Fourth Quinquennial European Logistics Study.'

Kilasi, LB, Juma, D & Mathooko, PM 2013, 'The impact of Outsourcing of Logistics on the Competitive Advantage strategy of East African Breweries Limited', International Journal of Social Sciences and Entrepreneurship, vol 1, no. 3, pp. 521-529.

KPMG Zimbabwe 2012, 'Commentary on the Zimbabwe 2013 Budget', KPMG Zimbabwe, Harare.

Kramarenko, V, Engstrom, L, Verdier, G, Fernandez, , Oppers, , Hughes, R, McHugh, J & Coats, 2010, Zimbabwe: Challenges and Policy Options after Hyperinflation, International Monetary Fund, Publication Services, Washington DC.

Krauss, SE 2005, 'Research Paradigms and Meaning Making: A Primer', The Qualitative Report, vol 10, no. 4, pp. 758-770.

Lai, K-H & Cheng, 2004, 'Just-in-Time Logistics', Gower.

Lim, SK & Mavondo, FT 2000, 'The structure of strategic capabilities, implications for organisational agility and superior performance: A conceptual framework', Conceptual Framework, Department of Marketing, Monash University, Monash University, Melbourne.

Londoño-Kent, P 2009, 'Freight Transport For Development Toolkit: Road Freight The Road Freight Industry In Low And Middle Income Countries', The International Bank for Reconstruction and Development, The World Bank.

Lu, H &Yirong, S 2002, 'An approach towards overall supply chain efficiency: A future oriented solution and analysis in inbound process.', Masters Thesis No. 2002:29, School of Economics and Commercial Law, Göteborg University, Göteborg University.

Mack, L 2010, 'The Philosophical Underpinnings of Educational Research', Polyglossia, vol 19, pp. 5 - 11.

Maina, PN 2013, 'Factors affecting fleet management in public sector: A case of selected embassies in kenya', Proceedings of 1st JKUAT-SHRD Research Conference, Jomo Kenyatta University of Agriculture and Technology, Nairobi.

Martin, A 2007, 'Company fleet management: An environmentally friendly approach', Institute of Directors, Director Publications Ltd.

Mason-Jones, R, Naylor, J & Towil, D 2000, 'Engineering the leagile supply chain', International Journal of Agile Manufacturing Systems, no. Spring.

McKinnon, A 2009, 'Innovation in Road Freight Transport: Achievements and Challenges', International Transport Forum / IMTT Seminar on 'Innovation in Road Transport: Opportunities for Improving Efficiency', Logistics Research Centre: Heriot-Watt University, Lisbon.

Meeuws, R 2004, 'Tanzania – Trade and transport facilitation audit', NEA Transport research and training, The Hague.

Miller, J 2012, 'Reliability And Validity', Graduate Research Methods.

Min, H 2013, 'Challenges and Opportunities for Minority Owned Trucking Firms Under Affirmative Actions: A Case Study', Global Supply Chain Strategy, pp. 1-20.

Mitchell, DW & Coles, CB 2003, 'Learning Agendas: Business Models that Work', Sydney.

Morris, L 2006, Permanent Innovation: The Definitive Guide to the Principles, Strategies, and Methods of Successful Innovators , Lulu.com, California.

Murray, W, Newnam, S, Watson, & Jeremy , D 2003, 'Evaluating and improving fleet safety in Australia', Road Safety Research Grant Report, Department of Transport and Regional Services, Australian Transport Safety Bureau.

Mutambara, T 2008, 'Regional transport challenges within the Southern African Development Community and their implications for economic integration and development', in A Bösl, Breytenbach, T Hartzenber (eds.), *Monitoring Regional Integration in Southern Africa Yearbook 2008*, Trade Law Centre for Southern Africa, Stellenbosch.

Nagarajan, M & Sosi, G 2008, 'Game-theoretic analysis of cooperation among supply chain agents: Review and extensions', *European Journal of Operational Research*, vol 3, no. 187, p. 187.

O'Reilly, J 2005, 'Truckers, Shippers & The Capacity Crunch: Shared Pain, Shared Gain', *Inbound Logistics*.

Olson, E 2006, 'Not by Technology Alone: Sustaining Winning Strategies', *Journal of Business Strategy*, vol 27, no. 54, pp. 33-42.

Parliament of Zimbabwe 2014, 'First Report of the Portfolio Committee on Transport and Infrastructural Development on the causes of road carnage', Parliament of Zimbabwe, Harare.

Patton, MQ 1999, 'Enhancing the Quality and Credibility of Qualitative Analysis', *HSR: Health Services Research*, vol 34, no. 5, pp. 1189 - 1208.

Peeta, S & Hernandez, 2011, 'Modeling of Collaborative Less-than-truckload Carrier Freight Networks', *NEXTRANS*, Project No 040PY02, Purdue University.

Pelegriňová, L & Pešáková, P 2011, 'INNOVATION BUSINESS MODELS: THE CASE OF EASTERN SLOVAKIA', *International Journal of Management Cases*, vol 13, no. 3, pp. 24 - 37.

Perkins, C 2012, 'Organisational Change Management Maturity', Change Management Institute.



Prinsloo, G & Mouchili, I 2008, 'The role of the transport sector in the New Partnership for Africa's Development (NEPAD)', *Journal of Transport and Supply Chain Management*, pp. 41 - 57.

Raduan, CR, Jegak, U & Alimin, II 2009, 'Management, Strategic Management Theories and the Linkage with Organizational Competitive Advantage from the Resource-Based View', *European Journal of Social Sciences*, vol 11, no. 3, pp. 402 - 417.

Rahman, H, Rahim, , Hamid , M & Zakaria, N 2005, 'Beyond basic: The potential role and involvement the QS in public projects – An observation', *QS National Convention 2005 Sustaining the Profession – Towards Diversification*, Kuala Lumpur.

Reyes, PM 2005, 'Logistics networks: A game theory application for solving the transshipment', *Applied Mathematics and Computation*, vol 168, pp. 1419–1431.

Ribeiro, K, Kobayashi, S & Zhou, P 2007, 'Transport and its infrastructure', *Climate Change 2007*.

Ribeiro, K, Kobayashi, S & Zhou, P 2007, 'Transport and its infrastructure', *Climate Change 2007*.

Rishi, S, Gyimesi, K & Burek, 2009, 'Truck 2020: Transcending turbulence', *IBM Global Services*, Somers.

Rodrigue, J-P, Comtois, & Slack, B 2006, *The Geography of Transport Systems*, Routledge, New York.

Ruske, K-D, Darkow, I-L & Reuter, 2011, 'Emerging Markets – New hubs, new spokes, new industry leaders?', *Transportation & Logistics 2030*, vol 3, pp. 1 - 64.

Saidi, N, Scacciavillani, , Ali, & Prasad, 2010, 'Dubai World Central and the Evolution of Dubai Logistic Cluster', *Economic Note*, Dubai international Finance Centre, 10, Dubai.

Sakchutchawan, S 2011, 'Innovation and Competitive Advantage: Model and Implementation for Global Logistics', *International Business Research*, vol 4, no. 3, pp. 10 - 21.

Sanchez-Rodrigues, V 2006, 'Supply Chain Management, Transport and the Environment- A Review', *Working Paper*, Green Logistics Consortium.

Santala, M 2009, 'Strategic Agility in a Small Knowledge Intensive Business Services Company: Case Swot Consulting', Master Thesis, Department of Marketing and Management, Helsinki School Of Economics.

Scott-Kemmis, D 2012, 'Responding to change and pursuing growth: Exploring the potential of Business Model Innovation in Australia', Australian Business Foundation, Australian Business Foundation Limited, Sydney.

Shafie, T 2003, 'Design-Based Estimators for Snowball Sampling', Department of Statistics, Stockholm University, Stockholm University, Stockholm.

Short, R, Barnor, &Gopaldas, A 2012, 'Constraints and Interventions An overview of the literature on Zimbabwe's economy, 2009–2012', Brenthurst Discussion Paper.

Sivakumar, A 2007, 'Modelling Transport: A Synthesis of Transport Modelling Methodologies', Imperial College, London.

Sreenivas, M &Srinivas, T 2006, 'The role of transportation in logistics chain'.

Teravaninthorn, S &Raballand, G 2009, 'Transport Prices and Costs in Africa: A Review of the Main International Corridors', Africa Infrastructure Country, The International Bank for Reconstruction and Development / The World Bank, Washington DC.

The Economist 2009, 'Organisational agility: How business can survive and thrive in turbulent times ', Economist Intelligence Unit.

The International Institute for Sustainable Development 2013, 'The Impacts of India's Diesel Price Reforms on the Trucking Industry', Research Report, Integrated Research and Action for Development, The International Institute for Sustainable Development, New Delhi.

The National Department of Tourism 2010, 'Service Excellence Requirements', White Paper, The National Department of Tourism, Pretoria.

Tidd, J, Bessant, J &Pavitt, K 2001, 'Managing Innovation', Integrating Technological, Market and Organisational Change', vol 2.

Transport Logistic Consultants 2007, 'Chirundu One-Stop Border Post Initiative Monitoring Project', Sub-Saharan Africa Transport Policy Program, Stakeholders Briefing Note, First draft report.

Tsokota&Solms 2013, 'ICT and the turning-around of the Zimbabwean Economy', "International Conference on ICT for Africa 2013, Harare.

Tukuta, M, Nkhosa, M &Gono, E 2012, 'A study on the impact of fleet management as a competitive tool in the Zimbabwean Road Haulage Industry', International Journal of Arts and Entrepreneurship, vol 1, no. 3.

U.S. & Foreign Commercial Service 2013, 'Doing Business in Zimbabwe: 2013 Country Commercial Guide for U.S. Companies', U.S.Department of State, Washigton.

Upton, J 2008, 'Best practice in freight transport operations', Report R08/59, Environment Canterbury, ISBN 978-1-86937-866-0, Environment Canterbury, Christchurch.

Vinci, LD 2005, 'Logistics – Basic Concepts & Characteristics', in Courier Routing through Innovative Emulation Learning program, Couriel.

World Bank 2009, ' Doing Business', World Bank, World Bank, Washington.

Zaini, BO 2000, 'Malaysian construction industry: challenges and demands', 3rd Annual Convention of Malaysian Structural Steel Association, Kuala Lumpu.

Zaušková, A, Bobovnický, &Madleňák, 2013, 'How can the state support the innovations to build sustainable competitive advantage of the country', Serbian Journal of Management, vol 8, no. 2, pp. 255 - 267.

Zereilli, S & Cook, A 2010, 'Trucking TO West Africa's Landlocked Countries: Market Structure AndConducT', Trade Hub Technical Report, 32, USAID.

Zhou, X 2013, 'Research on Logistics Value Chain Analysis and Competitiveness Construction for Express Enterprises', American Journal of Industrial and Business Management, vol 3, pp. 131-135.

Zimbabwe Investment Authority 2010, 'Exploring Investments In Zimbabwe', Zimbabwe Investment Authority, Harare.

## **APPENDICES**

**Appendix One: Sample in-depth interview guide**

University of Zimbabwe: Graduate School of Management

Research Topic: Transforming business practices in the Zimbabwean Haulage Transport  
Business Sector in order to gain sustained competitiveness

Dear Respondent,

I am an MBA student with University of Zimbabwe: Graduate School of Management. As part of my degree program, I am required to submit a dissertation in an area of interest and I have chosen the above captioned as my research topic. The aim of this dissertation is to analyse the transformation of business practices to gain sustained competitiveness, it is against this background that the objectives of this research will focus on the critical components of the new business practices that are vital for sustained competitiveness in the Zimbabwean business environment. This research is purely academic and is not associated with any commercial company. Please note that all answers will be confidential and will be used solely for the purposes of this research. All the information given in response to the questionnaire will be treated with utmost confidence. It is however key to highlight the importance of giving your views and opinions in a candid manner. Your co-operation and contribution is greatly appreciated.

Please be as exhaustive as possible.....

**Respondent's Profile**

Position in the organization .....

Years in the logistics sector .....

Academic and professional background .....

**Research Questions**

Haulage type: Break-bulk\ containers\ tankers

**What determines competitiveness?** (explain) .....

Explain your experiences of practices that had to be transformed to ensure competitiveness  
.....

To what extent does agility play a part in ensuring competitiveness? (explain).....

Any agility measures implemented before that ensured competitiveness. ....

**How does the innovative environment in your organization ensure competitiveness?**

Is it vital for competitiveness?

From experiences, is it easy to create an innovative environment in your organisation?  
(explain)

**Describe any cost cutting measures that were recently or need to be implemented to ensure competitiveness?**

Did they ensure competitiveness? Explain

**Have there been any fleet management transformations to ensure competitiveness?**

Did they improve competitiveness?

**Do collaborations have any effect on competitiveness?**

Are there any essential transformations relating to collaborations considering the traditional practices of privacy in doing businesses?

**How can the organization make ensure competitiveness when faced with the customs (clearance ) hurdles?**

Any practical examples?

**How do the prevailing pro-nationalisation laws affect competitiveness?**

**How has the organization reacted to the continued deterioration of the road to ensure competitiveness?**

**Anything more to discuss on practices that have to be transformed to ensure competitiveness?**

Thank you

## **Appendix Two: Brief Profiles of Respondents**

### **R001**

Fleet Manager, 8 years' experience, Advanced Diploma in Transport Management

### **R002**

Operations Director, 15 years' experience, Diploma in Logistics

### **R003**

Managing Director, 12 years' experience, Chartered Institute of Secretaries

### **R004**

Senior Operations Controller, 20 years' experience, Vehicle Inspection Certificate.

### **R005**

Administration Manager (Operations) 17 years' experience, Advanced Diploma in Transport Management, MSc Strategic Management

### **R006**

Marketing Coordinator 4 years' experience, B Comm Marketing, MSc Strategic Management

### **R007**

Operations Manager, 7 years' experience, Advanced Diploma in Transport



**R008**

General Manager, 36 years' experience, Apprentice

**R009**

Operations Manager, 18 years' experience, MA Transport Economics

**R010**

Depot Manager, 6 years' experience, BSc Economics

**R011**

Managing Director, 10 years' experience, Farming Certificate

**R012**

Operations Manager, 8 years' experience, Advanced Diploma in Logistics and Transport

**R013**

Fleet Manager, 5 years' experience, BBS

**R014**

Manager, 17 years' experience, Certificate in Transport

**R015**

Senior Manager, 10 years' experience, Diploma in Business Studies

### Appendix Three: Schedule of Codes and Subthemes

|                 | Resp 001  | Resp 002  | Resp 003   | Resp 004  | Resp 005  | Resp 006  | Resp 007  | Resp 008   | Resp 009  | Resp 010  | Resp 011                          | Resp 012                                     | Resp 013                                | Resp 014                             | Resp 015   | category   |
|-----------------|---|---|--|---|---|---|---|--|---|---|-----------------------------------|--|---|--------------------------------------|--|--|
| competitiveness | New Fleet                                       | 1.Competent drivers<br>2.good vehicles<br>3 good planning<br>4.innovation | 1.Impressive perception<br>2. Service personalisation<br>3.Readily available<br>4.Service excellence | 1 Best service<br>2 Timely delivery<br>3safe delivery<br>4.affected by Late payment | 1.adherence to old practices<br>2.transformations necessary<br>3 speed<br>4 personnel (drivers) | 1. high overheads<br>2.rightsizing<br>3. leasing premises<br>4. flexibility<br>5. right pricing                       | 1.Benchmarking new trends<br>2. Real time information analysis & gathering<br>3. Tracking & tracing | 1. abandon old practices<br>2. embrace change<br>3. demand for services<br>4. first class business | 1.size ,<br>2.age ,<br>3. Staff dvpt  | 1. flexibility<br>2. service quality<br>3. freight security<br>6. reliability | 1Not competitive<br>2. do nothing | custom service                               | 1.Communication<br>2.customer profiling | 1. new equipment<br>2.Responsiveness | 1.quality (speed, reliability)<br>2.cost structure | 1. better modern fleet<br>2.competent staff<br>3.service excellence<br>4. business transformation<br>5. IT & innovation<br>6. right costing and pricing<br>7.structure |
| agility         | 1.Meeting customer demands<br>2. Quick response | 2. not important  | Multi use trailers (quick adoption)  | 1.Adapting to demand (meeting demand)<br>2.Convertant with procedures               | 1. affected by size   | 1.unpredictable\ queer customer demands<br>2.fluctuating fuel prices<br>Trends<br>3 vehicle specs<br>4.global changes | 1. alertness<br>2.eliminating idle time<br>3.safety issues  | 1. changing the environment  | 1. seamless recovery<br>2. flexibility<br>3. shifts\<br>24/7<br>4.outsourcing | 1. abreast with change<br>2. IT   | nothing                           | increasing labour costs                      | changing vehicle specs                  | evolving global changes              | diff to maintain                                   | 1.Quick response to changes<br>2. new trends   |
| Innovation      | 1. Needs financial backing                      | light trailer   | 1.Offering more<br>2.Continual Research  | 1. Proper planning<br>2. Time management  | 1. product innovation difficult<br>2.differential new ideas                                     | 1.accessibility<br>2. IT  | 1. tight competition\ scarce loads<br>2. access to loads  | 1.outsourcing<br>2.networking<br>3. speed  | new methods   | 1. New services<br>2.processes  | Too expensive to implement        | 1 consolidation of loads<br>2.specialisation | 1.diversification<br>2. unique products | limited delays                       | Tracking & tracing                                 | 1.New trends<br>2.outwitting competitors Q4<br>3.financial   |

|                  |  |   |   |   |  |  |   |  |                        |  |  |                             |                               |  |                    |   |
|------------------|--|---|---|---|--|--|---|--|------------------------|--|--|-----------------------------|-------------------------------|--|--------------------|---|
|                  |  |   |   |   |  |  |   |  |                        |  |  |                             |                               |  |                    | backing   |
| Cost Management  | 1. Bridging middlemen<br>2. Fleet disposal<br>3. benchmarking            | 1. Optimal use of available resources<br>2. Driver training                                   | 1. Multiskilling<br>2. Tracking & tracing                                       | 1. Driver training<br>2. Travelling times (heat)<br>3. benchmarking | 1. use of current technologies<br>2. CCTV<br>3. cost cutting<br>4. forced leave    | 1. restructuring<br>2. consolidation<br>3. new different business  | 1. day driving only<br>2. security & convoys<br>3. technology                     | 1. fuel & tyre management<br>2. IT<br>3. Proper pressure           | standardisation        | Reduction of unnecessary staff costs   | prevent pilferage                        | Planned scheduled servicing | Driver training and education | driver monitoring                          | new fleet          | 1. effectiveness<br>2. IT<br>3. Trng & dvpt<br>4. cost cutting<br>5. innovation               |
| Fleet Management | 1. Scheduled servicing<br>2. Regular inspections<br>3. Met set standards | 1. Effective fleet allocation<br>2. Tracking & tracing<br>3. Backbone of operations           | 1. Standardisation (ISO)<br>2. Tracking & tracing<br>3. Third party inspections | 1. Improved communication<br>2. Tracking & tracing                  | 1. right fleet positioning<br>2. standalone FM dept<br>3. minimising vehicle abuse | 1. optimal vehicle usage<br>2. zoning<br>3. 1 horse, many trailers | 1. vehicle utilisation<br>2. regular servicing<br>3. driver training & debriefing | 1. Serial numbering<br>2. Tracking & tracing<br>3. Physical checks | tracking and tracing   | 1. Modern equipment<br>2. Effective scheduling<br>3. Tracking & tracing<br>4. Route monitoring | 1. Fuel management<br>2. tyre management | Operationaly minded         | Proper planning               | 1. shutting<br>2. strict vehicle servicing | tracking & tracing | 1. Vehicle repairs & maintenance<br>2. effectiveness<br>3. IT                                 |
| Collaborations   | 1. subcontracting  | 1. individualism<br>2. improper branding<br>3. culture harmonisation<br>4. economies of scale | 1. subcontracting<br>2. outsourcing   | 1. subcontracting   | 1. subcontracting  | 1. branding problems   | 1. information sharing<br>2. lobbying   | 1. individualism   | proper planning needed | 1. cooperatives<br>2. outsourcing  | Too difficult to implement               | backloads                   | attractive rate               | irony of privacy                           | Form cooperatives  | 1. challenges to collaborations<br>2. benefits of collaborations<br>3. forms of collaboration |
| Customs hurdles  | 1. Clearing bureaucracy  | 1. Interests advocati   | 1. Affects turn around  | 1. travelling restriction   | 1. corruptio<br>2. bribes  |  | lobbying for harmonisa  | preclearing  | 1. preclearing<br>2.   | 1. preclearing<br>2. turn  | 1. long turnaround                       | Engage ZIMRA                | One stop system               | .harmonisation                             | 3. obsolete techno | 1. proposed solutions   |

|                        |   |                                    |   |  |  |                                   |   |  |  |  |  |  |                       |                   |                     |   |
|------------------------|---|------------------------------------|---|--|--|-----------------------------------|---|--|--|--|--|--|-----------------------|-------------------|---------------------|---|
|                        | acy<br>2. Multiple clearing offices                                 | ng                                 | 2.Preclearing   | (EMA)<br>2.Preclearing                               |  |                                   | tion  |  | adequate conversancy                     | around bonuses                           | times                                  |  | not feasible          |                   | ogy                 | 2. clearing obstacles                               |
| Pro-nationalistic Laws | 1.Lack of service support   | 1. Non-existent<br>2. Easy evasion | 1. Affected FDI and economy                                 | 1. no effect. (Indigenous company)                   | corporate marriage of convenience                    | looking for subcontractors        | looking for subcontractors                    | addresses imbalance                                  | 1. no FDI<br>2. employee share ownership | inhibits competitiveness                 | greatly affected by political holigans | Should taxation based instead of share based | tailor-made proposals | Not affected      | Not affected        | 1.negatives<br>2.positives<br>3.adopting strategies |
| Road's state           | 1.Wear and tear<br>2.Accidents<br>2. do nothing                     | Affects regional trucking          | 1.Bad priority  | 1.slow speed<br>2. driver training and development   | 1. route diversion                                   | 1. high vehicle maintenance costs | 1. speeding (bad road)<br>2. day driving only | blacklisting of certain routes                       | other forms of transport                 | 1. route monitoring<br>2.rescheduling    | Very bad we have nothing to do         | High transit time                            | High toll fees        | 2. do nothing     | accidents           | 1.negatives<br>2.mitigations                        |
| General                | 1.New business philosophy<br>2. Adopting service support technology | customs harmonisation              | 1.BOP,<br>2.capacity utilisation<br>3.Government protection | 1. agile operations<br>2.research<br>3.consultations | 1. poor economic performance<br>2.protectionist laws | 1. SA<br>2. New fleet             | be at pace with changes                       | 1.accepting small profit margins<br>2.collaborations | Good CG                                  | 1. driver training<br>2. support service | 1.Have no hope in this business        | innovation                                   | consultation          | staff development | trade harmonisation | 1. SA problems<br>2. lobbying<br>3.transformations  |

