An investigation into the implementation of risk based internal auditing, “case study of the national railways of Zimbabwe”.

BY
RAYMOND MAPFUMO
R12626G

This dissertation is submitted in partial fulfillment of the requirements of the Bachelor of Commerce Accounting Honors Degree in the Department of Accounting at Midlands State University.

Gweru, Zimbabwe

OCTOBER 2014
The undersigned certify that they read and recommend to the Midlands State University for acceptance a dissertation entitled:

An investigation into the implementation of risk based internal auditing, “case study of the National Railways of Zimbabwe”.

Submitted by Raymond Mapfumo (R12626G) in partial fulfillment of the requirements of the Bachelor of Commerce Accounting Honors Degree (HACC) at Midlands State University.

.......................................................... ..........................................................
SUPERVISOR DATE

.......................................................... ..........................................................
CHAIRPERSON DATE

..........................................................
EXTERNAL EXAMINER DATE
## RELEASE FORM

<table>
<thead>
<tr>
<th>NAME OF STUDENT</th>
<th>Raymond Mapfumo</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISSERTATION TITLE</td>
<td>An investigation into the implementation of risk based internal auditing, “case study of the National Railways of Zimbabwe”</td>
</tr>
<tr>
<td>DEGREE TITLE</td>
<td>Bachelor of Commerce Accounting Honors Degree</td>
</tr>
<tr>
<td>YEAR THIS DEGREE GRANTED</td>
<td>2014</td>
</tr>
</tbody>
</table>

Permission is hereby granted to the Midlands State University Library to produce single copies of this dissertation and to lend or sell such copies for private, scholarly or scientific research purpose only. The author reserves the rights that neither the dissertation nor extensive extracts from it may be printed or otherwise reproduced without the author’s written permission.

| SIGNED | .......................................................... |
| DATE   | .......................................................... |

| ADDRESS: | 9. Milne Road |
|          | Sunnyside     |
|          | Bulawayo      |
|          | Zimbabwe      |

DATE: OCTOBER 2014
DEDICATION

This research is dedicated to my family, workmates, brothers and sisters from our church, fellow students and all the MSU lecturers who supported and encouraged me to carry out the study.
ACKNOWLEDGEMENTS

I would like to thank God the Almighty for the strength and spiritual guidance during my studies and particularly the taxing period of my research project.

My sincere gratitude goes to my supervisor, Mr. Kazembe for sparing his special time and extending his patience to support, guide and encourage me throughout the project. May the Lord bless you.

Special thanks also go to Mr. Sithole, the Chief Internal Auditor for the National Railways of Zimbabwe for allowing me time to pursue studies as well as my colleagues in the internal audit department for their support, advice and encouragement.

My thanks would go without meaning if I do not mention my fellow Accounting students for good friendship in sharing of knowledge.

My greatest appreciation goes to my family for their unwavering support, spirited encouragement and financial sacrifices.

May the Good Lord Bless You all.
ABSTRACT

This study sought to analyze the implementation of risk based internal auditing by organizations in Zimbabwe, with particular reference to the National Railways of Zimbabwe. In this study the knowledge and opinions of NRZ managers and internal auditors was sought to establish how risk based internal auditing was being implemented. Attention was to be drawn on discovering whether the implementation was carried out correctly and if not, then make corrective recommendations. The research commenced with defining the problem in chapter one, discovering how the implementation should have been carried out through reviews of literature in chapter two, laying out in chapter three the research methods to be employed to get data, obtaining data through interviews and questionnaires and analyzing findings in chapter four, through to reaching conclusions and making recommendations in chapter five.

The findings of the study were that the organization was not benefitting fully from implementation of risk based internal auditing because of weaknesses in its enterprise risk management systems.

It was therefore recommended that effective implementation of risk based internal auditing required management to establish an effective risk management framework.
TABLE OF CONTENTS

| APPROVAL FORM | i |
| RELEASE FORM | ii |
| DEDICATION | iii |
| ACKNOWLEDGEMENTS | iv |
| ABSTRACT | v |
| LIST OF CONTENTS | vi |
| LIST OF TABLES | vii |
| LIST OF FIGURES | ix |
| LIST OF APPENDICES | x |

CHAPTER 1 - INTRODUCTION

1.0 Introduction 1
1.1 Background to the Study 1
1.2 Statement of the Problem 3
1.3 Main research Question 3
1.4 Sub Objectives 3
1.5 Research Questions 4
1.6 Limitations of the Study 4
1.7 Delimitation of the Research 5
1.8 Justification of the Study 5
1.9 Definition of Terms 6
1.10 Chapter Summary 6

CHAPTER 2 – LITERATURE REVIEW

2.0 Introduction 8
2.1 What is Literature Review 8
2.2 What is Internal Auditing 8
2.2.1 History of Internal Auditing 8
2.2.2 Definition and Purpose 9
2.3 Risk 10
2.4 Enterprise Risk Management 11
2.5 Risk Based Internal Auditing 13
2.6 Implementation of Risk Based Internal Auditing 17
2.7 Risk Audit Universe 20
2.8 Benefits of Risk Based Internal Auditing 20
2.9 Pitfalls of Risk Based Internal Auditing 22
2.10 Chapter Summary 22

CHAPTER 3 - RESEARCH METHODOLOGY

3.0 Introduction 23
3.1 Methodology 23
3.1.1 Quantitative Methods 23
3.1.2 Qualitative Methods 24
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2</td>
<td>Research Design</td>
<td>24</td>
</tr>
<tr>
<td>3.3</td>
<td>Descriptive Design</td>
<td>24</td>
</tr>
<tr>
<td>3.4</td>
<td>Target Population</td>
<td>25</td>
</tr>
<tr>
<td>3.5</td>
<td>Sample</td>
<td>25</td>
</tr>
<tr>
<td>3.6</td>
<td>Sampling Procedures</td>
<td>26</td>
</tr>
<tr>
<td>3.6.1</td>
<td>Convenient Sampling</td>
<td>26</td>
</tr>
<tr>
<td>3.7</td>
<td>Data Collection Instruments</td>
<td>26</td>
</tr>
<tr>
<td>3.7.1</td>
<td>Primary Data</td>
<td>26</td>
</tr>
<tr>
<td>3.8</td>
<td>Questionnaire</td>
<td>27</td>
</tr>
<tr>
<td>3.8.1</td>
<td>Likert Scale</td>
<td>27</td>
</tr>
<tr>
<td>3.9</td>
<td>Personal Interview</td>
<td>27</td>
</tr>
<tr>
<td>3.10</td>
<td>Secondary Data</td>
<td>28</td>
</tr>
<tr>
<td>3.11</td>
<td>Data Collection Procedures</td>
<td>28</td>
</tr>
<tr>
<td>3.12</td>
<td>Data Presentation and Analysis</td>
<td>28</td>
</tr>
<tr>
<td>3.13</td>
<td>Validity and Reliability</td>
<td>29</td>
</tr>
<tr>
<td>3.14</td>
<td>Chapter Summary</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER 4 – DATA PRESENTATION, ANALYSIS AND DISCUSSION</strong></td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>Introduction</td>
<td>30</td>
</tr>
<tr>
<td>4.1</td>
<td>Questionnaire Response Rate</td>
<td>30</td>
</tr>
<tr>
<td>4.2</td>
<td>Analysis of Responses from Questionnaires</td>
<td>31</td>
</tr>
<tr>
<td>4.3</td>
<td>Responses to Interview</td>
<td>43</td>
</tr>
<tr>
<td>4.4</td>
<td>Y Analysis of Secondary Data</td>
<td>43</td>
</tr>
<tr>
<td>4.5</td>
<td>Chapter Summary</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER 5 - SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</strong></td>
<td></td>
</tr>
<tr>
<td>5.0</td>
<td>Introduction</td>
<td>45</td>
</tr>
<tr>
<td>5.1</td>
<td>Summary</td>
<td>45</td>
</tr>
<tr>
<td>5.2</td>
<td>Conclusions</td>
<td>46</td>
</tr>
<tr>
<td>5.3</td>
<td>Recommendations</td>
<td>47</td>
</tr>
<tr>
<td>5.4</td>
<td>Suggested Further Research</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>References</td>
<td>49</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Recoveries from Audit Recommendations</td>
<td>2</td>
</tr>
<tr>
<td>2.1</td>
<td>Implementing Risk Based Internal Auditing</td>
<td>15</td>
</tr>
<tr>
<td>3.1</td>
<td>Target Population Details</td>
<td>25</td>
</tr>
<tr>
<td>4.1</td>
<td>Questionnaire Response Rate</td>
<td>30</td>
</tr>
<tr>
<td>4.2</td>
<td>Understanding and Application of ERM Principles</td>
<td>32</td>
</tr>
<tr>
<td>4.3</td>
<td>Employees Afforded Training on Risk Based Internal Auditing</td>
<td>33</td>
</tr>
<tr>
<td>4.4</td>
<td>Risk Management Tasks Performed by Management</td>
<td>34</td>
</tr>
<tr>
<td>4.5</td>
<td>Extent of Risk Cover in the Organisation</td>
<td>36</td>
</tr>
<tr>
<td>4.6</td>
<td>Maintenance of Risk Registers in the Organisation</td>
<td>37</td>
</tr>
<tr>
<td>4.7</td>
<td>The Internal Audit Approach Employed</td>
<td>38</td>
</tr>
<tr>
<td>4.8</td>
<td>Rate of Adoption of Audit Recommendations</td>
<td>40</td>
</tr>
<tr>
<td>4.9</td>
<td>Gains Realised From Implementing Risk Based Auditing</td>
<td>41</td>
</tr>
</tbody>
</table>
### LIST OF FIGURES

| Figure 2.1 | Internal Audit’s Role in Enterprise Risk Management | 18 |
| Figure 4.1 | Recipients of Enterprise Risk Management Training | 31 |
| Figure 4.2 | Rate of Understanding and Application of E.R.M Principles | 32 |
| Figure 4.3 | Employees Afforded Training on Risk Based Internal Auditing | 34 |
| Figure 4.4 | Tasks Performed by Management | 35 |
| Figure 4.5 | Extent to which Risks were Covered | 36 |
| Figure 4.6 | Maintenance of Registers | 38 |
| Figure 4.7 | The Audit Approach Employed | 39 |
| Figure 4.8 | Rate of Adoption of Audit Recommendations | 41 |
| Figure 4.9 | Gains Realised From Implementing Risk Based Internal Auditing | 42 |
### LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Application to Carry Out a Research Project</td>
<td>52</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Questionnaire</td>
<td>53</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Interview Guide</td>
<td>56</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

This chapter introduces the background of the study which was the reason for the research. It also provides among others, the statement of the problem, the main research question and objectives of the study, limitations, definition of terms and a summary of the study.

1.1. Background To The Study

The NRZ is a designated corporate body in terms of the Railways Act, Chapter 13:09 as amended from time to time. It is wholly owned by the government of Zimbabwe, incorporated mainly to provide, operate and maintain an efficient system of public transportation of goods and passengers by rail. NRZ operates an extensive rail network covering 2 760 kilometers of permanent way, commonly known as track or rail. The NRZ employs more than 6000 employees through its fourteen functional departments which work together to meet the various transportation needs of clients.

A deteriorating infrastructure and equipment as a result of poor maintenance has seen the organization soldiering on with a system characterized at times by service cancellations, excessive delays in service delivery and accidents which have resulted in loss of precious life, limb and customers’ valuable goods. Consequently a lot of market share and opportunities have been lost to competitors, culminating in the NRZ failing to raise enough revenue to meet its operating costs as demonstrated by an “Accumulated Loss” of $ 204 Million as at 31 December 2013 (Year 2013 Financial Statements). This has manifested in the organization falling 10 months behind (approximately $ 55 million) on payment of salaries to employees, not timely honoring remittances to creditors, third party entities and
statutory (e.g. tax) payments, locomotive failures, and a diminished capacity to meet minimum fuel requirements, a constant cause for train service cancellations.

Despite these shortcomings, recoveries totaling $4.496 Million over the period from year 2011 to 2013 were realized from Internal Audit recommendations (table 1.1 below).

**Table 1.1: Recoveries from Audit Recommendations**

<table>
<thead>
<tr>
<th>YEAR</th>
<th>SECTION</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accounting $</td>
<td>Revenue $</td>
</tr>
<tr>
<td>2011</td>
<td>966 702.85</td>
<td>1 505 104.59</td>
</tr>
<tr>
<td>2012</td>
<td>149 115.00</td>
<td>718 759.18</td>
</tr>
<tr>
<td>2013</td>
<td>131 148.00</td>
<td>644 752.82</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1 246 965.85</td>
<td>2 868 616.59</td>
</tr>
</tbody>
</table>

*Source: Internal Audit Branch Annual Reports for years 2011, 2012 and 2013*

Table 1.1 above shows recoveries by sections of the department and were attributed to thefts, fraudulent activities, overpricing, non-delivery of prepaid service, uncollected rentals, duplicate payments, double accounting, omissions and overpayments to employees. Cost cutting measures which included curtailment of overtime and deployment of underutilized staff were also recommended.

The concept of Risk Based Internal Auditing was first intimated in the department midway through year 2012 and in his guidelines to year 2013 internal audits, The Chief Internal Auditor directed all audits to be risk based “henceforth” in line with the Audit Committee recommendations and the Institute of Internal Auditors best practice. This was then followed by auditors assisting departments to develop their respective Enterprise Risk Management Frameworks.
The above developments towards risk based internal auditing may perhaps be given credit for the reduction in recoveries in years 2012 and 2013. However, stemming from passive participation by departments due mainly to lack of formal training on Enterprise Risk Management principles, lack of comprehensive training given to Internal Auditors and inadequate resources, audits were still in practice, systems based as all programmed audits continued to be carried out by following a predetermined “Programme- and Record of Functional Tests (PRT)” as before. Precious audit time was therefore spent reviewing whole processes leading to less Audit coverage on risks threatening the achievement of objectives.

1.2. **Statement of the Problem**

The NRZ was failing to adequately identify and address its risks as intimated by the fore noted recoveries and underperformance thereby posing a threat to its going concern. Admittedly while an organization’s overall performance and audit contribution may generally not only be measured by the amount of recoveries made, these arguably help to indicate that more risks could be uncovered with an effective risk based internal auditing approach.

1.3. **Main Research Question**

How was risk based internal auditing implemented in the NRZ?

1.4. **Sub Objectives**

The following sub-objectives will be pertinent to the study:
 To establish how the concept of risk based internal auditing was perceived by stakeholders within the organisation?
 To confirm how risks were identified, documented, rated and controlled in the organisation (maintenance of risk registers)?
 To establish the risk appetite the organisation has set as a threshold.
 To proffer recommendations on how risk based internal auditing should be implemented in the company.

1.5. Research Questions

 Does the organisation have a functioning Enterprise Risk Management Framework?
 To what extent has the concept of risk based internal auditing been implemented in the organization?
 Are risks adequately identified, documented and monitored in the organisation?
 Is the internal audit function adequately resourced to carry out risk based internal audits?
 What is the organisation’s risk tolerance level?

1.6. Limitation to the Study

In conducting this research the researcher faced conditions beyond his control which hindered consistent data collection and placed restrictions on the conclusions of the study, most pertinent being the following:
Finance

The researcher encountered financial resource challenges to travel wide for information gathering. Hence student had to resort to accessing some information through the phone instead of physical travelling in addition to viewing some documents on the internet instead of printing.

Time

This resource was limited for the researcher as he had to deal with assignments for other modules of the programme, attend to lectures and demanding work assignments. To make time for the project, the student had to take time off and leave.

Access to Confidential Information

Some important information proved to be a challenge to be released by Management as it was considered to be strategic and confidential. As a result, the student had to seek prior approval and confirm that the information gained would be for academic purposes only in order to access the information critical to the project.

1.7. Delimitation of the Research

The research was confined to one organisation, the National Railway of Zimbabwe and covered activities recorded in Bulawayo, the Headquarters of the Railways during the period from January 2011 to December 2013. It focused on the implementation of risk based internal auditing in the organisation.

1.8. Justification of the Study

1.8.1 To Student

The research was carried out in partial fulfilment of the Bachelor of Commerce Honours Accounting Degree and the researcher will gain much knowledge on the operations of the NRZ Internal Audit function.
1.8.2 To Midlands State University

The research could also be of assistance to other students as a basis of future research and serves as a reference point.

1.8.3 To the NRZ

The research sought to encourage the organisation to enhance its Enterprise Risk Management efforts and proper implementation of risk based internal auditing.

1.9. Definition of Terms

**Enterprise Risk Management** A process designed to identify and manage potential risks and give assurance for the achievement of corporate objectives.

**Risk** Any occurrence that can impede one from achieving their intended goal.

**ERM** Enterprise Risk Management

**NRZ** National Railways of Zimbabwe

**RBIA** Risk Based Internal Audit

1.10. Chapter Summary

Chapter one of the research made specific reference to the background of the study, problem statement, objectives of study, the justification for the study, scope of study,
limitations of study, and definitions of pertinent terms. Chapter two provides a review on the implementation of risk based internal auditing.
CHAPTER 2

LITERATURE REVIEW

2.0. Introduction
This Chapter aims to define the concept of risk based internal auditing and illustrate how it is implemented. It also highlights why it is considered to be best practice and explores other contributions from various authors who have written about the same subject.

2.1 What is Literature Review?
In www.canberra.edu.au, [accessed 9 December 2014] literature review is described as the description of the literature relevant to a particular topic. In this research, relevant literature was sourced from books, journals and websites.

2.2 What is Internal Auditing?
2.2.1 History
The history of auditing may not be separated from that of accounting which, according to www.wyzant.com, [accessed 1.October 2014] can be traced as far back as 3500 BC to the Mesopotamian Civilization, early Egyptian and Persians, right through to modern day practice for the simple reason that accounting records starting with tokens or stones representing number of goods entrusted to agents being placed into balls of wet clay and the clay being broken by the receiver of goods and matched against the goods shipped which was a way of verifying records. Consequently, according to www.theiia.org, [accessed 24 September 2014] the Institute of Internal Auditors was then born in the USA in 1941 with standards
for the professional practice of Internal Auditing being introduced by the Institute in 1978.

2.2.2. Definition and Purpose

The International Standards for the Professional Practice of Internal Auditing (www.theiia.org) [accessed 17 September 2014] defines Internal Auditing as an objective, independent, assurance and consulting activity established for adding value and improvement to an organization’s operations which also assists the organization to accomplish its goals by providing a systematic disciplined approach to evaluating the effectiveness of risk management, control and governance processes.

According to the standards, in (www.theiia.org) [accessed 24 September 2014], the internal audit purpose is achieved by providing audit opinion and assurances on accuracy and reliability of financial and operating information, management effort towards identification and minimization of enterprise risks, compliance with external and internal policies and procedures, efficiency, effectiveness and economic utilization of resources in operations, and that all efforts are tailored towards effectively achieving the organization’s objectives.

The given definition is broad and identifies with the purpose and function of Internal Auditing and embraces virtually all the activities of internal auditing prior to the introduction of the risk based internal audit approach. Thus, in this context, internal auditing programs were therefore planned to appraise compliance to laid down organizational systems of operations without only targeting risky areas alone. This may be termed a systems-based audit approach whereby systems and cycles where audited across the organization to ensure existence of controls. This involved reviewing the cycles of operations from initiation up to reporting stage through sample testing and subsequently giving an audit opinion.
As the Institute of Internal Auditors continued to grow and develop in its endeavor of seeking to enhance its relevance and contribution to organizational survival and accomplishment of goals, it became more apparent that more audit effort needed to be focused on addressing those elements of risk which threatened achievement of goals. The Institute of Internal Auditors states in Standard 2110 (Risk Management) that internal audit effort would be more useful if it were to provide audit committees and management with information concerning whether or not risks have been adequately identified and how they were managed by bringing a structured, disciplined approach to evaluate and improve the effectiveness of risk control, management and governance process.

2.3. **Risk**

Risk in Collier, (2009) is generally viewed as the probability of something going wrong. Given management’s functions of planning, organizing, leading and controlling the activities in an organization in order to achieve the entity’s objectives, risks are synonymous with operations and it therefore becomes management’s prerogative to guard against risks that may impede the organization from its deliberate efforts of trying to achieve goals and objectives and this whole effort may be collectively termed Enterprise Risk Management. He also views risk as having both a down side which is where actual events would turn out worse than expected as in negative occurrences such as catastrophes or profits which are less than expected and the upside where actual results turn out to be surprisingly better or realizing more profit than what was anticipated and planned for.

Collier, (2009) also indicated that some risks such as natural disasters may not be controllable although the negative impact or element of surprise, whether positive or
negative may be reduced if the organization can find ways of identifying the risk and manage its responses to it.

The Institute of Risk Management (2002) in Collier (2009) also purported that Enterprise Risk Management is concerned with both the positive (upside) and negative (downside) aspects of risk, the positive aspects being that of missing opportunities as in saying “no risk no gain”, and the downside which merely refers to the possibility of something going wrong, examples being accidents or disasters.

Griffiths, (2006) supports the same view when he alleged that an organization which understood its risks would also understand its opportunities.

2.4. **Enterprise Risk Management**

Castanheira, Rodrigues and Craig (2009:81) refer to Enterprise Risk Management as a tool for examining all the risks faced by the organization and how they affect the accomplishment of goals. They further claim that “it is a structured, consistent and continuous process for identifying, assessing, deciding on responses and reporting on opportunities and threats that are associated with the accomplishment of goals in an organization.”

Coyle, (2003:165) identifies four basic elements to the risk management framework of an organization, namely risk identification, risk evaluation, risk management and control and review.

**Risk Identification** entailed that the organization’s continuous search to identify any risks that already existed or are emerging which would have a significant impact on the corporate objectives of the organization.

**Risk Evaluation** called for procedures to put a value on the potential size or materiality of the losses and their magnitude in the event of a negative outcome.
**Risk Management** meant measures encompassing decisions taken by management to deal with each risk, and they include, insuring the risk, avoiding the risk altogether through withdrawal and accepting the risk as an inevitable feature of the operations. The impact may be reduced through hedging, diversification or joint ventures as a way of spreading or sharing the risk. Coyle stressed the necessity of the responsibility of the Board to ensure risks are reviewed regularly and for management to adequately record risk, e.g. using risk registers and take suitable measures to deal with them.

**Control and Review** referred to systems put in place to detect, monitor and give feedback and feed forward on situations and significant events that will be developing or are getting out of control.

According to the King Report’s code of conduct in King Report (2002), the board was responsible for setting risk tolerance levels and implementing ongoing processes of identifying, measuring and managing risks. This gave them, in liaison with management, the overall portfolio for risk and setting up risk management policies in accordance with their risk appetite and thereafter, ensuring that this cascaded down to all responsible employees for implementation. Risk Management efforts should also be reported annually to Shareholders by the Board. In this vein, regular reports covering physical and operational risks, risks on human resources, technology, business continuity, credit, market and compliance as well as disaster recovery plans would be required from management for the board and other stakeholders’ consumption. Whistle blower facilities should also be introduced by management to remove the barrier of fear through protected reporting.

Collier, (2009) contends that the responsibility of identifying, evaluating and managing risks was vested in management. Griffiths (2006) argues that an organization’s objectives were threatened by risks which had to be responded to by management through accepting them, transferring or treating them within the level of risk tolerance acceptable to the
Board. To achieve this role, the management of an organization is therefore tasked with the responsibility for identifying existing risks, assessing the risks, ensuring an appropriate response to all risks and informing the board all the risks which are beyond acceptable tolerance levels.

In King’s report (2002) the internal audit function was tasked with providing assurance that risks were adequately identified and monitored, effectiveness of internal control systems, reliability of management generated information and ensuring that feedback on risk matters was effective.

For this to be achieved, the Internal Audit function would need a risk auditing enabling charter approved by the Board, have access and technical support of the Board and audit committee, reporting to the Chief Executive Officer of the organization. Audit plans needed to be based on risk assessments covering both existing and anticipated risks.

Standard 2600 of the International Standards for the Professional Practice of Internal Auditing provide that when the Chief Audit Executive believes that Senior Management has accepted a level of residual risk which may be unacceptable to the organization, the Chief Audit Executive had to discuss the matter with senior management and if this is not resolved, the Chief Audit Executive should report this to the board for resolution.

2.5. Risk Based Internal Auditing

Griffiths (2006) defined Risk Based Internal Auditing (RBIA) as the method for providing assurance that risks were managed to within the entity’s risk appetite”, the appetite being the allowed risk tolerance level.

Although management may be responsible for identifying and managing risks, the Internal Audit function in an organization would be responsibility for providing assurance that...
those risks were properly managed. The International Standards for the Professional Practice of Internal Auditing, standard 2010 provides that the Internal Audit plans be based on risks input from management and the Board.

Coetzee and Lubbe (2011) contend that a professional internal audit activity can become more useful to an organization by designing and focusing its work plans towards the organization’s risk management framework. They also argue that for management to establish a proper, risk management framework that would efficiently and effectively address their entity’s specific risk concerns, they need to have a general understanding of the concept of risk. It is also their understanding that Internal Auditors being employees of the organization have ready knowledge of how the organization operates, and with them already understanding risk concepts, should be in an ideal position to assist management with enterprise risk management.

A sound management understanding of the principle of risk management formed an ideal platform for implementing risk based internal auditing. Coetzee and Lubbe, (2011) however advised on caution to be taken by the auditors to observe due professional care and retain independence from making decisions concerning business activities and management structures and functions. Thus, the level of management’s perception on the concept of risk would determine whether internal auditors would give an audit opinion of assurance on risk management, or perform consultancy work.

Griffiths (2006) argues that the higher management’s risk maturity level is, in the scale starting from “risk naïve”, then “risk aware”, “risk defined”, “risk managed”, through to the ideal “risk enabled”, then the easier it is for risk based internal auditing to be implemented. Table 2.1 below demonstrates the pivotal role played by risk maturity of an organization in the implementation of risk based internal auditing.
Table 2.1: Implementing Risk Based Internal Auditing

<table>
<thead>
<tr>
<th>Maturity of Risk</th>
<th>Controls</th>
<th>Monitoring</th>
<th>Audit approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Enabled</td>
<td>All risks identified and assessed. Regular reviews of risks. Responses in place to manage risks</td>
<td>Management monitors that all risk response types are operating properly. All managers provide assurance on the effectiveness of their risk management and are assessed on their risk management performance</td>
<td>Assurance</td>
</tr>
<tr>
<td>Risk Managed</td>
<td>Majority of risks are identified and assessed. There is regular review of risks. Responses are in place to manage most risks.</td>
<td>There is some management monitoring that all types of risk response are operating properly</td>
<td>Consultancy</td>
</tr>
<tr>
<td>Risk Defined</td>
<td>Controls may be in place but may also not be linked to risks.</td>
<td>Minimum monitoring</td>
<td></td>
</tr>
<tr>
<td>Risk Aware</td>
<td>Controls exist, but some may be missing or not complete</td>
<td>Very little, if any monitoring</td>
<td></td>
</tr>
<tr>
<td>Risk Naïve</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Griffiths (2006:30)

Table 2.1 above shows risk maturity levels in management, namely risk naïve, risk aware, risk defined, risk managed and risk enabled and the levels according to Griffiths (2006) and these were explained as follows:
Where the organisation is ‘risk managed’ and going towards ‘risk enabled’, risk based auditing would be more applicable as emphasis will be more towards appraising the risk management process and devoting more audit effort towards verifying management’s responsiveness to risk. There is more of assurance work than consultancy on risk management process as an organisation approaches risk enabled status. However, due care should be taken to identify risks that may have been missed by management as well as deficient and redundant controls.

Middle of the road is ‘risk defined’ status. The entity has reasonable understanding of risk. However, detailed assurance work is mandatory to ensure that there is effective management of those risks that have been identified by management, while consultancy is also necessary on unidentified risks in order to assist management on enhancing the entity’s risk maturity to higher levels.

When the organisation or some of its functions are ‘risk naïve’, some controls will be missing and there will be very little if any monitoring of risks. In this state, risk based auditing though remotely possible is not recommended before management has undergone training and are now in a position to identify risks in their respective domains. Instead, risk driven audits under taking the form of consultancy would be recommended.

The danger for internal audit to identify risks without management’s involvement was that management would end up with a misconception that internal audit will be the one responsible for the risk management process of that particular risk. Griffiths, (2006).
2.6. Implementation of Risk Based internal Auditing

The Institute of Internal Auditors in an article titled “The 7 Step Process to Risk Based Auditing” (http://www.theiia.org) [accessed 17 September 2014] provides the steps as, understanding the business and its environment; preliminary risk assessment to determine risk levels, ratings and their management, where business risks include legal or regulatory risks, strategic risks, reputational risks and operational risks; developing a three year plan where low risks are reviewed once in three years, medium every other year, and high risk annually; complete a secondary assessment which may lead to re-rating of risks and chose appropriate audit approach; execution of the audit plan; conducting an exit interview with management and finally reporting.

According to the Institute of Internal Auditors Position Paper titled The Role of Internal Audit in Enterprise-wide Risk Management (IIA, 2009), the roles that a professional Internal Audit activity ‘must undertake,’ ‘could undertake with caution or safeguards’ and ‘should not undertake’ in the implementation of Risk Based Internal Auditing were diagrammatically illustrated as highlighted in the figure 2.1 below:
Figure 2.1: Internal Audit’s Role in Enterprise Risk Management


In the above illustration, (IIA 2009) independence from involvement in company executive decisions and audit objectivity should guide the auditors in their efforts of establishing a platform for risk based internal auditing.

Availability of resources has also been hinted as a limiting factor. For organisations which have a sound Enterprise Risk Management framework, risk based internal auditing assurance tasks such as; giving assurance on the risk management process, giving assurance that risks are correctly valued, evaluating risk management processes, evaluating how key risks are reported and reviewing their management would all be carried out by the internal audit department.
The Legitimate Internal Audit roles shown in the middle part of figure 2.1 above are consultancy tasks to be carried out by internal auditors in order for the organisation to have a sound risk management system. However, success in these tasks is said to be achieved only when safeguards are in place to ensure management remained responsible for risk management, the nature of internal auditor’s responsibilities ought to be documented in the Internal Audit Charter which should be approved by the audit committee, Internal Audit should not perform risk management work, but only provide advice, challenge and support to management’s decision making, Internal Audit function should not provide any form of assurance on any part of the Enterprise Risk Management framework for which it was responsible to set up as such assurance would be better provided by other parties, any work beyond the assurance activities would be treated as consulting engagement.

The Institute of Internal Auditors Position Paper titled, “What is Internal Audit” (IIA, 2012:2) however, argues that “Internal Auditors’ knowledge of risk management enables them to act as consultant and catalyst for improvement in an organisation’s practices”. This may involve conducting workshops to share risk management concerns with management.

Benli, and Celayir, (2014) however, argue that if the risk management framework is not very strong or does not exist; the organisation will not be ready for RBIA.

Benli and Celayir also list the steps to be taken in the implementation of risk based internal auditing, which are namely “to understand the client’s business environment and the general information about the business, assessing risks for the business, preparing the risk matrix, placing value on the risks, planning the internal audit activities and fitting them into the main audit plan and overall program, review the process, document the activities, review functional modules and reporting of results”.
2.7. Risk Audit Universe

This refers to the totality of all audit activities to be carried out by the internal audit function. It contains, among others, all the risks that would have been identified and documented by management and those identified by audit, risk rating in terms of their likelihood to occur and if they do, what their impact would be and having been categorised according to the organisation’s objective, risk owner, business unit, process and type, Griffiths (2006).

A well-constructed Risk Register containing risk description, impact should the event occur, probability of its occurrence, risk score, planned response, mitigation action and risk ranking as provided by management may also be the ideal document to construct the risk based audit plan which would show the nature timing and extent of assurance tests to be carried out on the entire audit universe.

(The Institute of Internal Auditors, Zimbabwe Presentation, 11 September 2012)

2.8. Benefits of Risk Based Internal Auditing

As risk based internal auditing is applied for assurance on risk management in an organisation, the benefits from its proper application cascades down from the advantages of effecting a sound risk management system and according to IIA (2009) are: a higher likelihood of achieving company objectives, consolidated reporting of different risks to the board, an improvement on understanding key risks and their wider implications, identifying and sharing of cross sectional business risks to avoid duplication of effort, greater management focus on issues that really matter, fewer surprises and crises effects, more internal focus doing the right things right, increased likelihood of change initiatives being
achieved, enhanced capability to take on greater risk for greater reward and more informed risk-taking and decision-making.

In IIA (2009), the benefits would flow as a result of clearer articulation and communicating of objectives of the organization, risk appetite being determined, establishment of an appropriate control environment and a risk management framework, identifying potential threats that may affect achievement of objectives, assessing the risk’s likelihood to occur and impact if it occurs, selecting and implementing risk responses, undertaking control and other response activities, consistent communication of information on risks at all levels in the organization, centralised monitoring and coordination of the risk management processes and outcomes and providing assurance on the effectiveness of risks management.

Also, according to Griffiths (2006), risk based internal auditing is a simple concept that directs everyone in the organization towards corporate objectives. Eventually there will be unity of purpose and objectivity when all effort is directed on organisational risks that impede on company goal accomplishment. Efficiency would be improved as more effort is directed at higher risks as opposed to all processes.

Hermatfar, and Hemmati, (2013) claim that risk based auditing and traditional auditing all address the concept of audit risk which comprises inherent risk, control risk and detection risk. They however, concede that risk based auditing takes a step further than traditional auditing by also highlighting the element of business risks.

King 3 report also argues that compliance based internal audit approaches add little value to an entity’s risks at strategic level as it merely assesses compliance with existing procedures and processes without evaluating whether or not the procedure or process would be an adequate control. On the other hand, a risk-based internal audit approach would be more effective as it allows internal audit to determine whether controls are
effective in managing the risks which arise from the strategic direction that the entity will be taking.

2.9. **Pitfalls of Risk Based Internal Auditing**

Griffiths (2006) notes the disadvantages of risk based internal auditing as: auditor independence being compromised as a result of a closer relationship with the rest of the organisation, more work for auditors as they have to convince management on the new modus which involve management sharing information on their risks and their fears with auditors, the need to train auditors for competence on the new approach in order for them to migrate from their old ways, and that some audits considered to be of lower income value earning such as social clubs disappearing.

2.10. **Chapter Summary**

The chapter provides a review of related literature regarding the implementation of risk based internal auditing. Chapter three outlines the methodology that is going to be applied by the researcher in carrying out the research.
CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

This Chapter spells out the methods that were used in this research when it was undertaken and different techniques that were used for data collection. Important aspects like the research design, sampling technique, data sources, research instruments, data collection procedure and data analysis are discussed.

3.1 Methodology

Methodology, in www.business.dictionary.com (accessed 28 September 2014), refers to the process used by a researcher to collect information and data. It is the general approach a researcher adopts when conducting a research. The researcher employed both qualitative and quantitative approaches in this research.

3.1.1 Quantitative Methods

According to Sobh. and Pery. (2006), quantitative research uses numbers and samples to test theories. Thus in this research, numerical data was employed to quantify or measure phenomenon and to produce findings. Hence questionnaires were handed to members of Management and the Internal Auditors to provide quantitative information.

It is because of the use of numbers that the study selected it to measure the quantum of responses to the questionnaires. The research used statistical tables, pie charts and bar graphs to present and analyze the numerous responses given.
3.1.2 Qualitative Methods

Sobh. and Pery. (2006) stated that qualitative methods use words and meanings to build descriptions of situations. This follows an observation, discovery, comparing or analyzing of the characteristics or attributes of a particular problem or situation. Qualitative methods describes the prevailing situation and this was the method employed to identify and analyze the problems faced in implementing risk based internal auditing in the National Railways of Zimbabwe. The interview with the head of internal audit department also took a qualitative form as the interviewee had room to provide quality views about the research problem.

3.2 Research Design

According to www.nyu.edu (accessed 24 September 2014) research design refers to the logical structure of the research. The research design allows the researcher to model the direction of his research by choosing and right mixing data collection methods to obtain data relevant to the study and intended objective. This also involves determining what information to gather, the source, designed method of data collection and importantly how the information will be presented to describe the particular situation.

3.3 Descriptive Design

Descriptive design in www.okstate.edu (accessed 28 September 2014) is for obtaining information about a current status and describes what will be obtaining about an existing situation. This research employed a descriptive design which enabled information concerning and defining the research problem to be sought, accurately defined and documented. In this research form, questions were administered through questionnaires and an interview which was rather telephonic A descriptive design provides balanced information as it allows data concerning a population to be gathered using both quantitative
and qualitative methods.

3.4 The Target Population

In [http://www.stats.gla.ac.uk](http://www.stats.gla.ac.uk) (accessed 08 October 2014), a target population or just population refers to the entire group that the researcher wishes to generalize conclusions on. Groups are often defined in terms of geography, occupation, time, requirements purpose, function, objective or some combination thereof. Risk based internal auditing involves appraisal of risk management decisions taken by management hence the category of employees under study were the Auditors, Management and the Head of the Internal Audit Department.

3.5 Sample

De Beuckelaer. and Wagner. (2012) referred to a sample as a small selection that can be chosen to represent the characteristics of a chosen group. The targeted population in this instance was National Railways of Zimbabwe Managers and Internal Audit personnel based in Bulawayo and their quantum and sample size is given in table 3.1 below.

**Table 3.1 Target Population Details**

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Target Population</th>
<th>Sample Size</th>
<th>Percentage Sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRZ Managers</td>
<td>66</td>
<td>20</td>
<td>30%</td>
</tr>
<tr>
<td>NRZ Auditors</td>
<td>29</td>
<td>20</td>
<td>69%</td>
</tr>
<tr>
<td>Head of Audit</td>
<td>1</td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>41</td>
<td>43%</td>
</tr>
</tbody>
</table>

Source: Survey
3.6 Sampling Procedures

3.6.1 Convenient Sampling

According to http://www.stats.gla.ac.uk (accessed 08 October 2014), convenient sampling is sampling that is done at the convenience of the researcher. The researcher used convenient sampling to select the 41 employees on the basis of availability, accessibility and their willingness to participate because of limitations on time.

3.7 Data Collection Instruments

Research instruments are the tools used for the collection of information and data needed to find solutions to a problem under study and these included primary and secondary data instruments.

3.7.1 Primary Data

In www.slideshow.nct (accessed 06.October 2014) primary data is viewed as that data being collected for the first time for that particular intended cause. The information collected was a direct presentation of facts by the very people who conduct the audits and those who are audited and are affected or directly involved in one way or another by the changes to the audit approach. The data collection instruments employed on primary data included questionnaires, interviews and observation.
3.8 **Questionnaire**

Panneerslvam (2005:23) refers to a questionnaire as “a systematic compilation of questions that are directed to a sample of population from which relevant information is desired”. In this research, questionnaires enabled the data to be collected within a short space of time since the researcher and respondents were also in Bulawayo. Questionnaires were impersonal, and allowed respondents to answer questions on their own with less pressure and anonymity. They afforded respondents to give answers freely, with less bias since the absence of the researcher would not influence the questions and answers. The information gathered was believed to be honest and voluntarily provided.

Although questionnaires may be associated with challenges such as being difficult to construct, and respondents not understanding the questions, these limitations were overcome by the researcher through follow up telephone calls and providing explanations where necessary.

3.8.1 **Likert Scale**

In [www.businessdictionary.com](http://www.businessdictionary.com) (accessed 28 September 2014) a likert scale is a method of giving quantitative value to qualitative data and the scale was used in the research to quantify qualitative choices on questionnaires.

3.9 **Personal Interviews**

According to [www.wisegeek.com](http://www.wisegeek.com) (accessed 08 October 2014), a personal interview is where one or more are or is asking questions and another or many is or are providing the answers. The researcher sought to have a personal interview with the Head of the Internal Audit department in anticipation of instant feedback from the interview. This would enable the researcher to immediately appraise the validity of the responses that were given.
Furthermore, communication barriers would be minimized as questions that were not understood would be rephrased and repeated for better apprehension. Information gaps left by the questionnaires would also be filled by the interview which was expected to allow the interviewee to say his mind out.

3.10 Secondary Data

Secondary data is described in http://www.iwh.ou.cw (accessed 07 October 2014) as data that is readily available. The researcher made use of secondary data sources which gave information on areas that the researcher found not covered by the primary data sources. The secondary data included NRZ’s articles, magazines, the internet, several books and company financial reports.

This data was easier to obtain as the researcher would easily access libraries in Bulawayo and Gweru and the internet.

3.11 Data Collection Procedures

The researcher sought permission from National Railways of Zimbabwe in order to carry out the research at the company. Most respondents were located in Bulawayo where the researcher is domiciled making it easier for administering the responses. Questionnaires were physically handed to respondents.

3.12 Data Presentation and Analysis

Data tabulation was presented through pie charts, bar graphs and narrative form.
3.13 Validity and Reliability

In [http://www.stats.gla.ac.uk](http://www.stats.gla.ac.uk) (accessed 08 October 2014), validity refers to the truthfulness while reliability relates to accuracy of the data. The research was performed in a way, which ensured that data remained valid to the study. Simple questions were used in order to solicit valid data from respondents. Great care was also given on selecting data collection instruments to improve reliability of findings. Triangulation was done where questionnaires and interviews were used so that weakness of one instrument would be complemented by the strength of another.

3.14 Chapter Summary

This chapter analyzed the research methodology that was used. Questionnaires and an interview were the data collection methods employed for data gathering. Justification was also analyzed for each research method that was chosen. Chapter four provides the presentation and analysis of collected data.
CHAPTER 4
DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Introduction

This chapter outlines data presentation, analysis and discussion of findings. These findings are presented in the form of bar graphs, tables and pie charts.

4.1 Questionnaire Response Rate

A total of 40 questionnaires were issued. Twenty were distributed to internal audit personnel while another 20 were given to managerial staff. In addition, an interview was conducted with the Head of the Internal Audit department. The response rate to the questionnaires was an overall eighty per cent as illustrated in table 4.1 below.

Table 4.1: Questionnaire Response Rate

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Questionnaires Issued</th>
<th>Questionnaires Received Back</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditors</td>
<td>20</td>
<td>18</td>
<td>90(%)</td>
</tr>
<tr>
<td>Managers</td>
<td>20</td>
<td>14</td>
<td>70(%)</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>32</td>
<td>80(%)</td>
</tr>
</tbody>
</table>

The total response rate of eighty per cent indicates reasonable representation of the target population and the research may be able to draw a conclusion of the general expected responses of the whole group.
4.2 Analysis of Responses from Questionnaires

The definition of risk based internal auditing given by Griffiths (2006) demands for internal auditors to provide assurance that risks were being managed to within an organisation’s risk appetite, and with Collier (2009)’s contention that the responsibility for risk management was vested in management, the level of enterprise risk management in the organisation becomes pertinent in this research. The following are responses to questionnaire questions asked in pursuit of satisfying the objectives of the research mentioned in Chapter 1.

4.2.1 Did you receive formal training on Enterprise Risk Management concepts?

Figure 4.1: Recipients of Enterprise Risk Management Training

Twenty two respondents representing sixty nine per cent of the respondents received training on enterprise risk management concepts while ten of them, also representing thirty one per cent did not. The high percentage of those afforded training on risk management points to Coetzee and Lubbe (2011) who noted that
internal auditors do have ready understanding of risk concepts and therefore are in an ideal position to assist management with the task of enterprise risk management.

4.2.2 On a scale of 1-5, how do you rate management understanding and application of Enterprise Risk Management principles?

Table 4.2 below shows a summary of responses to the above noted question.

Table 4.2: Understanding and Application of ERM Principles

<table>
<thead>
<tr>
<th>Scale</th>
<th>Rating</th>
<th>No of Responses</th>
<th>Responses as Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Below Average</td>
<td>8</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>Average</td>
<td>11</td>
<td>34%</td>
</tr>
<tr>
<td>3</td>
<td>Satisfactory</td>
<td>6</td>
<td>19%</td>
</tr>
<tr>
<td>4</td>
<td>Highly Satisfactory</td>
<td>4</td>
<td>13%</td>
</tr>
<tr>
<td>5</td>
<td>Excellent</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>32</td>
<td>100%</td>
</tr>
</tbody>
</table>

Information on table 4.2 above was employed on Figure 4.2 below to show graphically that twenty five per cent of the respondents were of the opinion that there was a below average understanding and application of E.R.M. principles by management.

Figure 4.2: Rate of Understanding and Application of E.R.M Principles
Thirty four per cent believed it was average while nineteen, thirteen and nine per cent chose satisfactory, highly satisfactory and excellent respectively. This indicates that there was a fifty nine per cent level of less than satisfactory application of E.R.M principles. Coetzee and Lubbe (2011) argued that management was required to have a general understanding of risk in order to establish a proper risk management framework.

4.2.3 Were you afforded adequate training on how the Risk Based Internal Auditing approach functions?

Table 4.3 below depicts record of employees who were afforded training on risk based internal auditing approach.

<table>
<thead>
<tr>
<th>Risk Based Internal Auditing Training</th>
<th>Number of Respondents</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trained</td>
<td>12</td>
<td>38%</td>
</tr>
<tr>
<td>Not Trained</td>
<td>20</td>
<td>62%</td>
</tr>
</tbody>
</table>

Twelve received adequate training on how the risk based internal audit approach functions while twenty did not, representing thirty eight and sixty two per cent respectively and this is also shown on a pie chart in figure 4.3 below:
Figure 4.3 therefore indicates that sixty two per cent still required training in order to appreciate the application of risk based internal auditing.

4.2.4 In your view, is management effectively performing the following tasks:

(Identifying Risks, Documenting Risks, Manage Risks, Rate Risks)

Table 4.4 below reflects results generated by the above question.

Table 4.4: Risk Management Tasks Performed by Management

<table>
<thead>
<tr>
<th>Task</th>
<th>Performed</th>
<th>As Percentage</th>
<th>Not Performed</th>
<th>As Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying Risks</td>
<td>32</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Documenting Risks</td>
<td>10</td>
<td>31%</td>
<td>22</td>
<td>69%</td>
</tr>
<tr>
<td>Manage Risks</td>
<td>32</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Rate Risks</td>
<td>4</td>
<td>13%</td>
<td>28</td>
<td>88%</td>
</tr>
<tr>
<td>Totals</td>
<td>78</td>
<td>61%</td>
<td>50</td>
<td>39%</td>
</tr>
</tbody>
</table>
The detail in table 4.4 above may also be represented in the form of a bar chart as shown in figure 4.4 below:

**Figure 4.4: Tasks Performed by Management**

As seen on figure 4.4 above, all the thirty two respondents or one hundred per cent indicated that management was identifying and managing risks. Ten and four or thirty one and thirteen per cent respectively were of the opinion that management was documenting and rating risks. Twenty two and twenty eight or sixty nine and eighty eight per cent were of the view that the two tasks were not being carried out.

Table 4.4 also shows that in total, management was performing sixty nine per cent of its risk management tasks and leaving out thirty nine per cent which is made up mainly of the tasks of documenting and rating risks which is mandatory for the implementation of risk based internal auditing.
4.2.5 In terms of percentages, to what extent were risks covered in the organisation?

Table 4.5 below shows a summary of responses to the above question.

Table 4.5: Extent of Risk Cover in the Organisation

<table>
<thead>
<tr>
<th>Risks Covered</th>
<th>No of Respondents</th>
<th>Respondents as %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 25%</td>
<td>4</td>
<td>13%</td>
</tr>
<tr>
<td>25 – 50%</td>
<td>16</td>
<td>50%</td>
</tr>
<tr>
<td>50 – 75%</td>
<td>12</td>
<td>37%</td>
</tr>
<tr>
<td>75 – 100%</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Four respondents or thirteen per cent were of the view that risks were being covered or managed up to twenty five per cent while sixteen or fifty per cent felt that twenty five to fifty per cent of the risks were covered. Twelve or thirty seven per cent were of the view that it was fifty to seventy five per cent of the risks that were being managed No one could give the organization more than seventy five per cent covering of risks. According to Griffiths (2006:30), when the majority of risks are identified with responses in place but monitoring is limited, the appropriate audit approach would be more of consultancy than risk based internal auditing.

Figure 4.5: Extent to which risks were being covered
4.2.6 Were risk registers being maintained in the organisation?

Table 4.6 below shows responses to the above question.

### Table 4.6: Maintenance of Risk Registers in the Organisation

<table>
<thead>
<tr>
<th>Maintenance of Risk Registers</th>
<th>Number of Responses</th>
<th>Responses as Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registers Maintained</td>
<td>8</td>
<td>25%</td>
</tr>
<tr>
<td>Registers Not Maintained</td>
<td>23</td>
<td>72%</td>
</tr>
<tr>
<td>Not Aware</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Eight respondents or twenty five per cent indicated that risk registers were maintained while twenty three or seventy two per cent said they were not. One or three per cent was not aware. In the Institute of Internal Auditors presentation of 11 September 2012, a risk register is necessary for constructing a risk based internal audit plan.

The above results may also be presented on a pie chart as shown in figure 4.6 below:
4.2.7 What internal audit technique do you think was being employed in the organisation?

Table 4.7 reflects results of responses to the above question.

Table 4.7: The Internal Audit Approach Employed

<table>
<thead>
<tr>
<th>Audit Approach Employed</th>
<th>Number of Responses</th>
<th>Responses as a %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Based</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>System Based</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Combination of Risk and System Based</td>
<td>29</td>
<td>91%</td>
</tr>
</tbody>
</table>
The findings were that two or six per cent had indicated that it was risk based. One or three per cent indicated that it was system based while twenty nine of the respondents or ninety one per cent felt that it was a combination of risk and system based.

Figure 4.7 below is a pie chart showing what the respondents viewed as the audit approach being employed.

**Figure 4.7: The Audit Approach Employed.**

Thus, the majority is of the view that the approach currently employed was a mixture of both risk and system based.

### 4.2.8 Does the organisation have a Risk Management Framework?

According to the research questionnaires, fourteen or forty four per cent of the respondents felt that a risk management framework was in place while eighteen or fifty six per cent were of the opinion that it did not exist. Thus, the research
revealed that it was not certain that an effective risk management framework existed in the organisation.

4.2.9 Is risk management affected by availability of resources in the organisation?

The thirty two respondents representing one hundred per cent were unanimous in saying that risk management was being affected by resource capacity. The same view was also stated in the interview with the Head of Internal Audit department.

4.2.10 In terms of percentages, how do you rate management’s adoption of internal audit recommendations?

Table 4.8 below depicts what respondents viewed as the rate of management’s adoption of internal audit recommendations.

<table>
<thead>
<tr>
<th>Rate</th>
<th>No of Respondents</th>
<th>Respondents as %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>25-50%</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>50-75%</td>
<td>26</td>
<td>82%</td>
</tr>
<tr>
<td>75-100%</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.8 above shows that three respondents each or nine per cent each were of the opinion that 25-50% and 75-100% of audit recommendations were adopted while twenty six representing eighty two per cent believed that the adoption rate was between 50-75%. Thus the overall adoption rate of audit recommendations is in the main on a positive side.
The data on table 4.8 above may also be used to present the information graphically as shown in figure 4.8 below.

**Figure 4.8: Rate of Adoption of Audit Recommendations**

4.2.11 Were there any gains that were noted on financial results since the implementation of risk based internal auditing?

Table 4.9 below shows responses to the above question.

**Table 4.9: Reflection of Gains from Implementing Risk Based Auditing**

<table>
<thead>
<tr>
<th>Results of Implementing (RBIA)</th>
<th>Number of Responses</th>
<th>Responses as a %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Gains Realised</td>
<td>6</td>
<td>19%</td>
</tr>
<tr>
<td>Gains Realised</td>
<td>26</td>
<td>81%</td>
</tr>
</tbody>
</table>
Twenty six respondents or eighty one per cent felt that there were gains realised from the implementation of risk based internal auditing while six or nineteen per cent had indicated that there were no gains.

Figure 4.9 below is a pie chart showing a graphical presentation of the narration above.

**Figure 4.9: Gains Realised from Implementing RBIA**

The gains witnessed by the eighty one per cent also confirms the position taken by Coetzee and Lubbe (2011) where the audit function becomes of more use to organisations by focusing effort on risk management framework.
4.3 Responses to an Interview with the Head of the Internal Audit Department

The Head of the Internal Audit Department was of the opinion that the organisation was a low risk taker and did not have a formal structure responsible for Enterprise Risk Management. Consequently the risk management portfolio was assigned to one of the Directors on a caretaker basis and there had not been regular follow ups and active growth of enterprise risk management practices since year 2012.

He also advised that most risks were known although their documentation and rating lagged behind, hence audit techniques employed being a mixture of risk and system based. He also pointed that resource availability was militating internal audit activities although most audit recommendations were adopted by the organisation. The Audit Head also acknowledged the reduction in revenue leakages attributed to the introduction of risk based internal auditing.

4.4 Analysis of Secondary Data

Table 1.1 represented recoveries from audit recommendations for the years from 2011 to 2013 and shows a reduction in revenue leakages in years 2012 and 2013 as a result of the introduction of risk based internal auditing.

Griffiths (2006) argued that the implementation of risk based internal auditing was directly related to the organisation’s level of enterprise risk management framework. The Institute of Risk Management (2002) in Collier (2009) notes the importance of risk management for an organisation’s success and further alleged that the responsibility for identifying, evaluating and managing risks was vested in management. King’s report (2002) shared the same view, adding that the audit function was only to provide assurance that risks were being adequately identified and managed.
Apart from listing various steps to be taken on implementing risk based internal auditing, the Institute of Internal Auditing also agreed that success of the new audit technique was dependant on the risk maturity level in the organisation. The Institute also suggested in a position paper in year 2009 that the audit function could carry out tasks such as coaching management in responding to risks and maintaining and developing the enterprise risk management framework.

However, Griffiths argued that taking that route would require a lot of caution as management would end up with a misconception that Internal Audit would be the ones responsible for the management of that particular risk.

The King 3 report contended that risk based internal auditing was more effective in assisting organisations to achieve its objectives.

### 4.5 Chapter Summary

The chapter looked at data presentation and analysis of the responses to questions provided in the questionnaires and interview as well as a review of secondary data. Recommendations from the research are presented in Chapter five.
CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

Chapter four dealt with data presentation, interpretation and analysis. Chapter five is made up of 3 sections, namely the summary of the research, recommendations and research conclusions.

5.1 Summary

The research study sought to analyse challenges encountered on implementing risk based internal auditing. Chapter 1 of the research made specific reference to the background of the study, problem statement, objectives of study, the justification for the study, scope and limitations of study, and definitions of pertinent terms.

Chapter 2 provided a review of related literature regarding the implementation of risk based internal auditing. Griffiths (2006), and the Institute of Internal Auditors at http://www.theiia.org (accessed 17 September 2014) gave details and steps to be taken in order for an organisation to successfully implement risk based internal auditing.

Chapter 3 outlined the methodology that was applied by the researcher in carrying out the research and justification for the methods employed to get the data. Questionnaires and an interview were the methods used for gathering the data.
5.2. **Conclusions**

5.2.1 Implementation of risk based internal auditing required the organisation to first have a sound risk management framework. This view was shared by Benli and Celayir (2014), Coetzee and Lubbe (2011) and Griffiths (2006).

5.2.2 The organisation’s implementation of risk based internal auditing was being held back by the absence of an effective risk management framework in the organisation. Results from information gathered through questionnaires and the interview with the Head of Internal Audit confirmed this deficiency. Up to date risk records were vital input documents for establishing the risk audit universe and eventual compilation of risk based internal audit plans necessary for conducting risk based internal auditing.

5.2.3 That some audit activities including risk based internal auditing were being held back by inadequacy of resources.

5.2.4 Internal audits in the organisation were largely conducted using a combination of both risk based and systems based approaches as a result of the continued infancy of the organisation’s risk maturity level, confirming Griffiths (2006)’s contention that when the risk management system of an organisation is not well established, the audits take more of consultancy than risk based internal auditing.

5.2.5 The research was a success as it managed to prove that risk based internal auditing was the best practice and brought to the fore what should be avoided and how the audit department can assist management to enhance the risk management framework which was mandatory for effective functioning of risk based internal auditing.
5.3 **Recommendations**

5.3.1 The organisation has realised gains through risk based internal auditing and is recommended to continue pursuing it because it has improved the organisation’s financial results through directing both management and internal audit effort towards those down and upstream risks which play a pivotal role in the attainment of corporate objectives. This view is supported by Griffiths (2006) and Hermatfar and Hemmati (2013) and King 3 report who all applaud the approach’s ability to give attention to business risks.

5.3.2 The risk management framework is not prevalent in all sectors of the organisation where risk registers are not maintained and internal audit should continue doing consultancy work and assist management to improve on their risk maturity from the lowest level of being ‘risk naïve’ up to ‘risk enabled’ when risk based internal auditing becomes applicable as stated in Griffiths (2006). Risk based internal auditing should continue where the risk management framework is solid.

5.3.3 The organisation should strongly pursue ranking and rating of risks as this leads to efficiency and effectiveness by directing scarce resources towards higher level risks and as alluded at [http://www.theiia.org](http://www.theiia.org) (accessed 17 September 2014), where the internal audit function may rank risks as higher, middle and lower level risks and incorporate in the audit plan to review them at least once a year, once every other year and once in three years respectively, thus maximising on scarce audit resources.

5.4 **Suggested Further Study**

Exploring the idea of Internal Auditors coaching Management on Enterprise Risk Management Principles is recommended as this will bridge the gape that affects proper
implementation of risk based internal auditing. This was hinted in Coetzee and Lubbe (2011) who was of the opinion that auditors were ideal to assist management in improving their enterprise risk management.
References:

Books


Journals


Documents


Institute of Directors

Railway Act [Chapter 13:09] Zimbabwe

Websites


www.canberra.edu.au, [Accessed 9th December 2014]


APPENDIX A

APPLICATION TO CARRY OUT A RESEARCH PROJECT

R.T.K Mapfumo (358260)
Internal Audit Branch
BULAWAYO

18 August 2014

The Chief Internal Auditor
Internal Audit Branch
BULAWAYO

Dear Sir

APPLICATION TO CARRY OUT A PROJECT IN THE NATIONAL RAILWAYS OF ZIMBABWE: YEAR 2014

1. I am applying for your permission to carry out a research project in the organisation.
2. The project is titled “An investigation into the implementation of Risk Based Internal Auditing, Case Study of the National Railways of Zimbabwe” and is mandatory in the fulfilment of my Bachelor of Commerce, Accounting Honours Degree with the Midlands State University of Zimbabwe.
3. Any information gathered concerning the organisation will be treated with confidence and used strictly for academic purposes only.
4. Your favourable response and honoured support in the above will be greatly cherished.
5. Thank you in advance

Yours sincerely

R.T.K MAPFUMO

MSU Student Reg No: R12626G
Dear Sir/ Madam

RF: Questionnaires for respondent

I am a student at Midlands State University studying towards a Bachelor of Commerce Honours Degree in Accounting. As required by the institution, I am carrying out a research project in partial fulfilment of my studies entitled “An investigation into the implementation of Risk Based Internal Auditing, (Case study of the National Railways of Zimbabwe)”.

You are kindly requested to assist by completing the questionnaires attached to this letter. The information obtained will strictly be treated with confidentiality and used for academic purposes only.

Please kindly indicate your choice of responses by ticking in the spaces provided.

Your contribution to this research is greatly appreciated.

Yours faithfully

Raymond Mapfumo

Student Registration No: R12626G
## QUESTIONNAIRE

**Please Note**
Where a scale of responses is required, the following will apply:
1 = Below Average  
2 = Average  
3 = Satisfactory  
4 = Highly Satisfactory  
5 = Excellent

1. How long have you been employed by the Organization?
   - Less than 5 years  
   - 5-10 years  
   - 10-15 years  
   - More than 15 years

2. What is your highest level of Education?
   - Master’s Degree  
   - Honours Degree  
   - Diploma  
   - Other  
   (Specify) .................................................................

3. Did you receive formal training on Enterprise Risk Management concepts?
   - Yes  
   - No

4. Were you afforded adequate training on how the Risk Based Internal Auditing approach functions?
   - Yes  
   - No

5. On a scale of 1-5, how do you rate management understanding and application of Enterprise Risk Management principles?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

6. In terms of percentages, to what extent were risks being covered in the organisation?

<table>
<thead>
<tr>
<th></th>
<th>0-25%</th>
<th>25-50%</th>
<th>50-75%</th>
<th>75-100%</th>
</tr>
</thead>
</table>

7. Does the organisation have a Risk Management Framework?
   - Yes  
   - No
8. In your view, is management effectively performing the following tasks?

<table>
<thead>
<tr>
<th>Task</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying Risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documenting Risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manage Risks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate Risks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. What internal audit technique(s) do you think were being employed in the organisation?

- Risk Based
- System Based
- Combine Risk-System

Other: (Specify) .................................................................

10. Were Risk Registers being maintained in the organisation?

- Yes
- No
- Not Aware

11. Is risk management affected by availability of resources in the organisation?

- Yes
- No

12. Is risk based internal auditing receiving adequate management support?

- Yes
- No

13. In terms of percentages, how do you rate management’s adoption of internal audit recommendations?

<table>
<thead>
<tr>
<th>Percentage</th>
<th>0 – 25 %</th>
<th>25 – 50 %</th>
<th>50 – 75 %</th>
<th>75 – 100 %</th>
</tr>
</thead>
</table>

14. Were there any gains that were noted on financial results since the implementation of risk based internal auditing?

- Yes
- No
APPENDIX C
INTERVIEW GUIDE

INTERVIEW QUESTIONS FOR THE HEAD OF INTERNAL AUDIT DEPARTMENT

1. Does the organisation have a functioning Enterprise Risk Management Framework?

2. To what extent has the concept of risk based internal auditing been implemented in the organization?

3. Are risks adequately identified, documented and monitored in the organisation?

4. Is the internal audit function accorded its rightful place in the organisation?

5. Is the internal audit function adequately resourced to carry out risk based internal audits?

6. What is the organisation’s risk tolerance level?

7. What is the best practice in Internal Auditing?