FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

B.Com Accounting Honours Degree

Investigation on the factors leading to abnormal shrinkage percentages at branch especially Bon Marche and company level. Case study: OK Zimbabwe Limited.

SUBMITTED BY

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This dissertation is submitted in partial fulfillment of the requirements of the Bachelor of Commerce Accounting Honours Degree in the Department of Accounting at MSU.

Gweru: Zimbabwe, May 2014
The undersigned certify that they have supervised the student dissertation entitled, “Investigation on the factors leading to abnormal shrinkages at branch and company level: Case Study – OK Zimbabwe Limited,” submitted in Partial fulfilment of the requirements of the Bachelor of Commerce Accounting Honours Degree at Midlands State University.

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DEDICATION
This project is dedicated to God the Father, the Son and the Holy Spirit; His grace carried me through and to my family for their unwavering support in all perspectives.
ACKNOWLEDGEMENTS

Special gratitude is extended to my supervisor Mr Kazembe and my lecturer Mr Mvurafor their guidance, inspiration, patience and moral support. I am also grateful to my Pastors: Patrick and ShuwisaiTavengwa and Stanley and NatsaiNyagope for their unwavering compassion, inspirational encouragement and phenomenal care.

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My sincere gratitude goes to OK Zimbabwe Limited especially the Management Accounting Department for their steadfast support, patience and assistance.

May God continue blessing them and meet them at their point of need.
ABSTRACT
The research study sought to investigate on the factors leading to abnormal shrinkage percentages at branch and company level. A significant rise in the shrinkage percentages of OK Zimbabwe Limited especially the Bon Marche branches led to the initiation of the study. The main research objectives were to examine the drivers of shrinkage and to come up with strategies that may be employed to manage abnormal shrinkages. Accredited scholars and journals were used to gain explicit understanding of the topic under review. The global outlook of shrinkages enabled the researcher to view OK Zimbabwe as a world class retailer and how it stands. A case study descriptive design was used to carry out the research. Interviews and questionnaires were employed as research instruments for primary data collection. The authenticity of the questionnaires was 97.4% and a 100% from the interviews after administering a sample of 38 questionnaires and conducting 5 interviews. Tables, graphs, pie charts, descriptive explanatory notes and interview summary were adopted for the presentation and analysis of data. The results revealed that a significant percentage of abnormal shrinkages were caused by employee theft followed by customer theft, administrative errors and supplier fraud. It was recommended that OK Zimbabwe Limited should view shrinkage as a people, process and technical challenge where a holistic approach should be employed by involving all departments within the organisation towards tackling abnormal shrinkages.
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CHAPTER 1

INTRODUCTION

1.0 Introduction
This chapter of research will focus on the background of the study. The background exploits facts, statistical data and management remarks leading to a problem under study. It also includes the statement of the problem, the main research question, research objectives, sub-research questions, delimitations of the study and assumptions. The significance of the study, definition of terms and a chapter summary follows.

1.1 Background of Study
OK Zimbabwe Limited (OK Zim) continues with success to be the dominant leading retailer in Zimbabwe and establishing its presence in the region (OK Zim Annual Report 2012). Over the past years it has recorded real growth in turnover and in profitability despite the economic challenges that prevailed in the nation. Revenue generated for the year ended 2013 increased by 16.3% to $479.6 million from $412.6 million in the prior year (OK Zim Annual Report 2013). These include the adoption of the multicurrency system which posed high uncertainty in terms of exchange rates.

Actual shrinkage is accounted for after every inventory count. In the past inventory counts were conducted quarterly in any financial year. This policy was changed in F11 (April 2010 – March 2011 financial year) to monthly counts in order to improve controls over inventory accounting as stated by management in the Annual Report (2011: 33 note 4.1). Shrinkage calculations are done in the Management accounting department under the Finance section.

The Group has managed to improve its shrinkage percentage since it adopted the new calculation timeframe. However the percentages of shrinkage remain high in comparison with the set standard of 0.5% used as an average for all branches nationwide according to the company policy. See table 1.1 below.
Table 1.1 OK Zimbabwe Shrinkage Value and Percentage at Selling

<table>
<thead>
<tr>
<th></th>
<th>F13</th>
<th>Variance (F13-F12)</th>
<th>F12</th>
<th>Variance (F12-F11)</th>
<th>F11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shrinkage Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($) mil</td>
<td>2.17</td>
<td>0.01</td>
<td>2.16</td>
<td>1.63</td>
<td>3.79</td>
</tr>
<tr>
<td>Shrinkage (%)</td>
<td>0.80</td>
<td>0.13</td>
<td>0.73</td>
<td>0.27</td>
<td>1.00</td>
</tr>
<tr>
<td>Variance to Average (%)</td>
<td>0.30</td>
<td>0.23</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Table 1.1 shows that shrinkage was being maintained at a high level. In F13 shrinkage was 0.3% more than average compared to F12 which was 0.23% above average. The Finance Director Mr Siyavora in October 2012, placed much concern about the high percentages and sent a memo message to the management accounting department stating that full explanatory reports should accompany any branches with abnormal shrinkages.

FariseMchekeni, the Area Manager for all Bon Marche branches sent an e-mail in December 2012 to the Bon Marche managers and accountants to take due diligence towards inventory count and to report to her and the Finance Manager Planning should their shrinkage be abnormal. This was done after noticing that the Bon Marche branches had abnormal shrinkage percentages as shown in the table 1.2 below.

Table 1.2 OK Zim Bon Marche Shrinkage by branch

<table>
<thead>
<tr>
<th></th>
<th>Year F13</th>
<th>Var to average</th>
<th>Year F12</th>
<th>Var to average</th>
<th>Year F11</th>
<th>Var to average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowdale</td>
<td>1.45</td>
<td>0.95</td>
<td>1.15</td>
<td>0.65</td>
<td>2.23</td>
<td>1.73</td>
</tr>
<tr>
<td>Avondale</td>
<td>1.54</td>
<td>1.04</td>
<td>1.48</td>
<td>0.98</td>
<td>0.9</td>
<td>0.4</td>
</tr>
<tr>
<td>Chisipite</td>
<td>1.27</td>
<td>0.77</td>
<td>1.04</td>
<td>0.54</td>
<td>1.44</td>
<td>0.94</td>
</tr>
<tr>
<td>Mt Pleasant</td>
<td>1.42</td>
<td>0.92</td>
<td>1.57</td>
<td>1.07</td>
<td>2.2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Source: OK Zim Board Report 2013

Borrowdale, Chisipite and Mt Pleasant shrinkage percentages from F11-F12 decreased though there were still above the company’s average of 0.5%. The shrinkages rocketed to
abnormality in F12 for the three branches. Avondale’s percentages continued to be abnormal throughout the three years under study.

The abnormal shrinkages may be due to qualitative and quantitative information which was generated from the branches and at the head office. Among the quantitative factors there were adjustments made to the stock count. These included approved invoices, internal requisitions, issues and invoices, mark downs/ups, own use and sales on the tax card. These documents were included on the statistics used to calculate monthly shrinkage. Departmental shrinkages and other subsidiaries (OK Stores, OK Express and OK Mart) may also have led to abnormal shrinkages.

Administrative errors in calculations due to fatigue, lack of knowledge or ignorance may have added to high shrinkages. There were also other qualitative factors which may have contributed to the high shrinkages. These included theft, supplier’s fraud, collusion, shop lifting.

1.2 Statement of the Problem
Though OK Zim is enjoying an increase in profits at face value, it has come to the researcher’s attention that the shrinkage percentage to sales which gives the shrinkage expense was high compared to the company’s set standard both at Group level and at branch level especially Bon Marche. This may be due to inventory count adjustments, departmental shrinkage, fraud, theft, collusion and shop lifting.

1.3 Main Research Question
What are the factors contributing to abnormal shrinkage percentages in branches especially Bon Marche?

1.4 Research Objectives
- To examine the drivers of abnormal shrinkage such as theft, fraud and collusion.
- To analyse departmental shrinkage percentages in branches.
- To examine administrative errors made when calculating shrinkage.
- To suggest strategies to manage abnormal shrinkage.
1.5 Sub-Research Questions

- To what extent do the drivers such as shop lifting, theft, fraud, lead to abnormal shrinkages?
- What impact do departmental shrinkages have on the overall branch shrinkage?
- What impact do administrative calculation errors have on shrinkage?
- What strategies can be implemented to manage abnormal shrinkage?

1.6 Delimitations

Due to the complexity of OK Zim in nature the study will be focused on the period 2011-2013. The research shall be based on management accounting information at OK Head office located in Graniteside Harare and Bon Marche branches in Harare. Shrinkage will be the main focus of the study. The time factor has led to the research being based on questionnaires, interviews and sampling.

1.7 Assumptions

- All interviews are held in good faith.
- The data collected is reliable.
- The statistical results are adequate to explicitly exploit the problem in question.
- Respondents will answer questionnaires sent to them with true integrity.
- Secondary data for the study is accessible.

1.8 Significance of the Study

To the researcher

Research study is in partial fulfilment towards acquiring the accounting honours degree. The study has also benefited the researcher in enhancing research techniques through the gathering of information for the study.

To the University

The University enhances its library documentation by shelving the research study. It aids to the sources used by the students to gain knowledge and information on such a particular study.
To the company
It enables the Group to realise any form of collusion, fraud and theft within the company. This will improve the profitability of the company as a whole and the performance of the branches.

1.9 Definition of Terms

Abnormal Shrinkage
The unavoidable excessive loss generated in the retail sector due to theft, fraud and collusion. The difference between actual physical stock and ledger stock measured against adjustments that occurred up to the date of stocktake. Excessive unaccounted for inventory loss.

Administrative errors
These errors made in the accounting system and those made by personnel when calculating shrinkage resulting from use of wrong data, fatigue, negligence and ignorance to reviewing of work.

Collusion
Conspiracy of two or more persons to treacherous activities for their own mutual benefit whilst suffering loss to the company.

Fraud
Intentional misrepresentation of inventory existing made by one person to another with knowledge of its falsity and deliberate deception practised in order to secure unfair and unlawful gain.

1.10 Summary
The chapter has covered the background of the study which gives a depth into the research to be done. It also outlined the objectives to be covered, the research questions, assumptions and the delimitations of the study which pose as challenges to the researcher. Lastly were the definitions of the terms that are used by the company under study. The next chapter will cover the literature under review.
CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Literature review is a pre-condition for doing substantive and thorough, sophisticated research. In order to advance the study’s collective knowledge, the researcher has to understand what has gone before. It therefore describes the history of the topic and key literature sources, illustrating major issues and refining the focus of the research in a way that can ultimately lead to one or more research questions (Gray 2009). Literature review presents a comprehensive analysis of the major objectives of the study through reviewing sources like textbooks, internet, online electronic journals, articles and newspapers.

2.1 Examination of Shrinkage Drivers

As defined by www.qfinance.com (19/03/14;0520) abnormal shrinkage is the unexpectedly high level of reduction in inventory that has contributed to an abnormal loss. Whereas Levy and Weitz (2012) argue that it is excessive inventory reduction that is caused by shoplifting by employees or customers, by merchandise being misplaced or damaged or by poor bookkeeping. A shrinkage of 1.7 % results in an average loss of profits of 19%. The crimes suffered by retailers result to a 25% decrease in profits.

Don Bush, Marketing Vice President for Kount and survey co-sponsor added in http://www.retaildigital.com (19/03/14;05:25) that, 85% of the UK retailers face challenges in controlling and overcoming online retail fraud which is increasingly becoming a customer’s theft field. Online shopping continues to drive the retail shrink at sky rocketing figures.

According to the survey held by The Retail Fraud Survey (2013/2014) published by Retail Consultancy, Retail Knowledge Limited and sponsored by Payment Experts Kount and Volumatic, shoplifting or external theft is the major drive of shrinkage in retailing shops; according to 30% of the surveyed retailers, followed by employee theft of stock at 27%. The survey also noted that, in today’s retail environment those who
commit fraud put no distinction between in-store and online stealing. Significant online loss, according to 51% respondents is due to stolen debit and credit cards.

According to Chee-Yew (2013) there is a yearly increase of shrinkage in the retail market caused by employee theft. It is a major drive of retail abnormal shrinkage and special attention has to be given for its prevention and control. A vast amount of money $266 million is lost in the retail establishment due to theft; 3.9% reported to be from employees.

Carter at http://EzineArticles.com (19/03/14;05:00) in her article elaborated shrinkage to be the difference between perpetual book inventory and the physical count. The comparison of what is documented and what is actually received, what is sold and the price changes is referred to as the book inventory. Physical inventory constitutes the total value and volume of goods actually on hand. Carter further cited that the main general causes for abnormal inventory loss are paperwork errors, internal theft and shop lifting.

Brekke, vice president of asset protection at Target Corp in Levy and Weitz (2012), estimated that more than 50% of theft at Target chain involves some high tech-twist whether in how the goods are stolen or how they are unloaded. Ann Zimmerman cited in Levy and Weitz (2012), that retail creation of counterfeit barcodes is increasingly becoming a dominant factor leading to employee theft.

Chee-Yew (2013), argued that, despite huge amounts of expenditure spent on technological and many adopted security measure internal theft continues to play a significant role in retail abnormal shrinkage. Employee theft therefore causes significant losses to the retailers thus it cannot be ignored.

Bamfield (2011) argued that, refund fraud is immensely defrauding retailers. This type of retail crime is growing by the day and is gradually becoming a challenge to the retailers. He further viewed refund fraud as a collusive method of crime between customers and employees and it is also used by criminal gangs. The stolen merchandise can be easily disposed of as they can be sold at a discount of 30%-40% compared to the original retail price. The U.S. National Retail Federation (2012) estimated an enormous $8.9 billion loss in retail stores caused by refund fraud.
National Retail Federation (NRF) (2011) cited that organised retail crime (ORC), defined as retail crime for resale by criminal gangs or by professional groups, had a huge bearing on retail supermarkets worldwide. Retail crime was often viewed as ‘victimless’ and penalties were low, since it carries lower risks professional criminals are seeing it as a gateway for new crime. Cargo fraud was a much more common method used by ORC. Shrinkage has therefore grown immensely because of ORCs. See figure 2.1.

**Figure 2.1 Percentage Retailers Suffering Increases in ORC**

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage Experiencing Increase in ORC</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>60%</td>
</tr>
<tr>
<td>Latin America</td>
<td>55%</td>
</tr>
<tr>
<td>Middle East/Africa</td>
<td>45%</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>40%</td>
</tr>
<tr>
<td>Europe</td>
<td>40%</td>
</tr>
<tr>
<td>Grand Totals</td>
<td>50%</td>
</tr>
</tbody>
</table>

Source: Changing Retail, Changing Loss Prevention (2013)

ORC were most significant in North America (where 58.4% of retailers suffered an increase in organised retail crime), but even in Europe, 41.7% of retailers claimed to have experienced increased losses from organised crime and 38.5% in Asia Pacific.

According to OECD (2012) online retailing is now responsible for between 8% and 12% of retail sales in many developed countries and is continuing to grow rapidly. The most common crimes so far affecting online operations are: fake orders, payment frauds, and delivery frauds. Online businesses may also be subject to hacking attacks, denial-of-service and viruses and malware. In addition to outright losses, “cybercrime”- however it is defined – has the potential to destroy a company’s reputation and making it liable for fines by official regulators.
A similar argument can be made about new payment systems being introduced involving near-field communications and mobile/smartphone devices. Most attention is being paid to the extent to which smartphones and tablets may be used for ordering merchandise and making payments, so changing the way the retail supply chain operates once again. In many retailers these changes are being led by the retailer’s marketing and operational needs with less attention being paid to loss prevention, even though the potential liabilities for fraud and reputational damage are immense (OECD 2012).

GRTB (2010) in Bamfield (2011:10) published a regression analysis of how changes in loss prevention spending were associated with changes in shrinkage. A statistical relationship was found which could predict 62% of the variation in shrinkage. The equation was as follows:

\[
\text{Shrinkage} = 380 - 611.\text{LPspend} + 9.69.\text{LPemployees} - 6.67.\text{LP equipment} \quad (\text{SE})
\]

\[
(78) \quad (126) \quad (3.31) \quad (2.54)
\]

\[
\text{R}^2 \text{ (predicted)} = 61.9\%
\]

\[
\text{DW} \ 1.1477
\]

LPspend – loss prevention expenditure actuals.

LPemployees – direct and indirect LP employees.

LPequipment – investment in loss prevention long-term assets.

The equation shows that there is an association between decreased loss prevention spending and higher shrinkage.

Shinde (2012) defined shrinkage as the loss of products between point of manufacture or purchase from supplier and point of sale (POS). The difference in the retail profit margin amount constitutes to shrinkage. Retail shrinkage is the difference in the value of stock as per the books or system and the actual stock available in the shop or the reduction in physical inventory caused mainly by process failure, errors, shoplifting and employee theft. The significant drivers of retail abnormal shrinkage are mainly internal theft, external theft, administrative errors and supplier fraud.

According to Bamfield (2011) the main sources of retail shrinkage are: theft by customers; employee theft; theft and fraud by vendors; and malfunctioning processes and procedures, such as incorrect counting of inventory, incorrect pricing and invoice
problems. One of the most fundamental debates between retailers is whether the largest element in shrinkage is caused by shoplifting or by employee theft. The Global Retail Theft Barometer (GRTB) (2011) identified the main sources of their shrinkage loss using retailers from around the globe as shown in figure 2.2.

**Figure 2.2 Sources of Global Retail Shrinkage**

![Shrinkage as percentage of retail sales](image)

**Source: Changing Retail, Changing Loss Prevention (2011:3)**

Shoplifting was perceived globally to be the largest source of shrinkage (responsible for 43.2% of shrinkage), followed by employee theft (35.0%). Supplier/vendor fraud was 5.6% of shrinkage and process failures and accounting/procedural error was thought to be responsible for 16.2% of shrinkage. However there were great differences between countries and regions.

In North America and Latin America employee theft was perceived to be the greatest source of shrinkage loss (44.1% and 42.6% respectively) and this was true for all the GRTB reports. In Europe and Asia-Pacific, shoplifting was thought to be the predominant source of loss (47.7% and 53.3% respectively). The early studies solely concerned with European retailers (the ERTB), show consistently that in those countries shoplifting loss has exceeded the losses from employee theft every year. Nevertheless, employee theft in Europe was responsible for 30.2% of retail shrinkage losses and in
North America shoplifting accounted for 35.8% of shrinkage, so the value stolen by these second-ranking offences was still very significant.

2.1.1 Factors Leading to Shrinkage Drivers

A small box of razor blades or priceless jewellery big or small people will steal anything. Theft criterion often meets one or all of the following: steal ability (can the goods be stolen effortlessly); inherent personal rate of gains against risks; and price exploitation (Bamfield 2012). Many products meet this criterion. Thieves believe that when stealing cheap small items no one minds thus the merchandise is not always expensive but easily accessible to stealing (Bamfield 2012).

GRTB (2011) argued that recession led to enforced leisure, consumer confidence in the future has fallen, and living standards have often been curtailed by curbs on salary decreases, inflation, short-time working. The fact that the economic shock to millions of households and the changed expectations of consumers and employees have may have altered the perceptions and behaviour of many people, making them more accepting of theft and more willing to take a chance when they see an opportunity for illicit gain. An average of one-third of retailers believed that the recession was the main driver of increased shoplifting and 22.2% of them thought that this also explained higher employee theft as shown in figure 2.3.
In North America (predominantly the U.S.), where the recession had started earlier than many other countries and whose retailers suffered the third largest increase in shoplifting (after Slovakia and the Czech Republic), the proportion of retailers ascribing the cause of increased shoplifting to the recession was much higher at 47.5%. As early as 2009 respondents to the GRTB were reporting that they were seeing more ‘amateurs’ stealing from their stores and they were often stealing different products such as goods for household use. This suggested that the pattern and cause of offending may have altered. In contrast only 16.9% of Asia Pacific retailers thought that the recession was the main cause of higher shrinkage.

Shrinkage rates rose from an average of 1.35% to 1.43% (GRTB, 2009). This was due to changes in loss prevention spending. The year 2009 was one where many retailers responded to the fall in consumer demand by reducing their loss prevention budgets along with all other budgets as a means of cutting the operating costs of the business.
2.2 Impact of Departmental Shrinkage on Overall Shrinkage

www.scholar.google.com (20/03/14;05:10) cited that, the highest shrinkage departments for general merchandise were fashion accessories and costume jewellery, at 6.45%. “Robbery, Employee theft, Leading Causes of Supermarket Losses,” Chain Store Age; Based on the Food Marketing Institute’s annual security survey, argued that, cigarettes, health and beauty care, meat, liquor and analgesics ranked as departments with rocketing shrinkages due to massively stolen items.

Levy and Weitz (2012) pronounced that, shrinkage varies by department and season. Typically if the department of clothing in the men’s sector increase their sales by 10%, then the retail can expect a 10% increase in their shrinkage for the period.

2.3 Examination of Administrative and Calculation Errors on Shrinkage

According to Levy and Weitz (2012:434) the calculation of shrinkage measure by taking the difference between the inventory’s recorded values (theoretical inventory) based on merchandise bought and received; and the physical inventory in stores and distribution centres (physical inventories are typically taken semi-annually). The theoretical calculation is as follows:

\[
\text{Theoretical inventory} \rightarrow 5 \\
\text{Physical inventory} \rightarrow 4 \\
\text{Sales} \rightarrow 20 \\
\text{Shrinkage (5-4)/20} \rightarrow 5\%
\]

Sullivan (2014) article commented that, if the company cannot identify its paper shrink, then it does not have an accurate handle on its real shrink. For example, to reduce exceptionally high shrinkage in a particular department, loss prevention gives more attention towards the security of inventory against theft whilst the problem lies with the administrative errors in that particular department. A lot of money and time may therefore be spent in vain. The ability to identify and control paper shrink directly affects a company’s ability to determine and accurately measure the real losses that require corrective Loss Prevention (LP) action and control measures.
The University of Florida 2012 study shows that 17.5% of shrink results from administrative and paperwork error. Shrinkage is germinating and growing in retail poor processes and policies whilst retailers are focused on theft related abnormal shrinkage drivers. When a substantial amount is lost due to paperwork shrink that's when administrative calculation and errors receive attention.

2.4 Strategies to manage Abnormal Shrinkages

2.4.1 Strategic Implementations to Manage Abnormal Shrinkages

Loss Prevention (LP) Magazine (2014) reported that, elaborate inventory control systems have been implemented by a number of retailers to reduce excessive unaccounted for inventory losses; known as abnormal shrinkage which emanates from employee theft, shoplifting, and vendor fraud. Included in the strategies for cutting abnormal shrinkages are: installation of sophisticated camera systems, sensor devices, exception reporting to mention but just a few. A more comprehensive LP approach towards shrinkage is required so as to uproot and tackle abnormal shrinkages; working from vendor to sales floor. All departments including representatives from the finance, accounting, inventory control, merchandising/buying, distribution, IT, customer service and human resource must be involved in reducing abnormal shrinkages.

Levy and Weitz (2012) cited that, loss prevention program is implemented to protect merchandise whilst creating a mobile working environment. The store design must also be attractive and present a trusting atmosphere to the employees. Store management, visual merchandising and store design co-ordination are important factors for LP to effectively work.

According to www.ukessays.com/essays/business/The_damage_of_theft_to_a_business,(20/03\14; 05:10) internal control systems comprise policies, practices, and procedures employed by the organization to achieve the objectives of the business including reducing abnormal shrinkage. The internal control systems act as a shield that protects the firm’s assets from numerous undesirable events that bombard the organization. These include inside employees’ workplace theft, customer theft, attempts at unauthorized access to the firm’s
assets (including information); collusion; employee incompetence, faulty computer programs and other mischievous acts.

Mawson (2009) argued that, retailers need to be focused on reducing the risk of theft on shelves and implementing and developing effective and efficient inventory control systems to avoid overpaying suppliers. He further commented that too many retailers simply accept shrinkage as a fact of life; however it is proving to cost retailers 3% of their revenue and many retailers believe that it is caused by theft rather than systems within the retail.

www.deloitte&touche.com (18/03/14; 05:30) cited security technologies that are being adopted by retailers to minimise abnormal shrinkage due to theft as follows:

i. Point-of-sale data mining software solutions- the cash register is used to detect potential theft at the point of sale and reported to the personnel in charge. These packages are very mobile as they can be viewed by anyone at any time worldwide by the click of a button. They are tied together with digital camera and can produce evidence via images of the interaction of employees and customers during a particular transaction.

ii. Source tagging programs - actual products or the product packages are inserted with tiny anti-theft tags labels the size of a paper clip which are hidden effectively from view.

iii. Self-alarming anti-theft tags-alarms automatically ring when a customer attempts to remove the tag inappropriately.

According to www.retail.com (18/03/14:05:15), working with progressive retailers, Cisco IBSG (2010) has found that the most effective way of tackling abnormal shrinkage is via the integration of employees, processes and technologies. Data is consolidated into one warehouse by the application of retail core systems. Middleware applications enables retail managers to view shrink related data in a comprehensive manner as the information becomes more accurate and timeous. Workflow applications automatically analyse the data in real-time producing critical shrink-related results which enable managers to tackle the root causes of rocketing shrinkages just in time.
Bamfield (2011) cited that, over the last few years, employees, stores, depots and offices are being thoroughly supervised to ensure that the laid out rules, practices and procedures laid out by the LP programs in the retail are being administered effectively. Extensive store and depot audits are therefore held to assess the cooperation of all units towards the loss prevention policy and procedures. In 2007 the proportion of retailers who had implemented store and depot audits was 70.1% which increased to 84.0% in 2011. Compared to 31.5% in 2007 of retailers who conducted an average of three or more store and depot audits 2011 had 64.0%.

Konstantinou and Kokkinos (2004) argued that in order to identify and reduce shrinkage retailers have to take a holistic approach in eight steps as shown in figure 2.4
Recognize the benefits and risks associated with abnormal shrinkage. Address shrinkage reduction with a holistic approach as an organisation. Process review is executed in the area of focus using exhaustive flow diagrams. Other than employee theft, external theft and the financial inventory accounting method, identify other possible reasons that cause abnormal shrinkage. Prioritise solutions to focus and optimise shrinkage reduction efforts. For an efficient and effective roll-out take into account the budgetary constraints when developing the action plan, timing and responsibilities. Calculate the bearing that abnormal shrinkage has on retail profitability. Implement and manage control procedures on the business case.
2.4.2 Technical implementation strategies to manage abnormal shrinkage

Mawson (2009) believes that many retailers focus their efforts on internal and external theft by paying for CCTVs and security systems, where the main issue is often process failure which drags into leakage and abnormal shrinkage where nobody knows where these amounts are gone. All what it needs from retailers and businesses is to focus on inventory control systems and consider them as an investment.

According to Shinde (2012) retailers should avoid blind spots when arranging goods in the store since shoplifters mostly require privacy. Display cases with locks should be made available to put in small and expensive items or they are kept behind the counters. CCTV filming all areas of the store is the most successful way to prevent shoplifting. Installation of physical obstacles such as alarms at the store exits, and closing the back exit of the shop would also prove beneficial.

Matthews in McGrane (2008) cited that one the major technic being used to battle against crime and theft in the retail sector is the installation of CCTVs. O’Leary (2008), CCTV sales manager for Osmosis commented that technologies like CCTVs are popularly being adopted by retailers. The integration of CCTVs and POS data results in an analytical tool used to directly connect to the cash register to observe cashiers behaviour and detect any change thereof. Retailers must also put cameras and security in the backroom, stock areas and possibly on the perimeter doors all of which can be connected to CCTV.

www.retail.com(18/03/14;05:15) cited that the portal technologies can also be connected to mobile phones hence retail managers and even the CEO can view the shrinkage performance of the company from a long distance. Radio Frequency Identification (RFID) will also be an arsenal in reducing shrinkage in the retail sector.

www.retail.com (20/03/14;05:15) commented that Point-of-Sale (POS) is a crucial area of internal theft and is very challenging to police. Therefore loss prevention professionals now regard POS systems as security devices. These systems were ranked to be the most frequently used after employee awareness programs. Transaction monitoring and generation of exception reports is done via the integration of POS systems and CCTVs. One of the main products that retailers are reaching for is POS till scan where a
camera monitors the till and the cashier. Security can observe all the events where no scan went through, so shrink evidence can be searched in that way (McGrane 2008).

(19/03/14:05:00) mentioned that the high costs of technological securities proves to be a barrier to retailers towards its adoption and implementation thereof. Costs included are those of research and development, purchasing, implementation, training, system management to mention just a few. Lack of technological standardisation resulted in data incompatibility and worldwide acceptance requires standardisation of the technical securities.

2.5 Case Studies

Zimmerman in Levy and Weitz (2012) cited that, “Redner’s Warehouse Markets, a chain in Reading, Pennsylvania, has 0.16% of retail sales shrinkage making it one of the lowest industry shrinkage. By educating it employees about the impact of shrinkage on the company and supporting the awareness with incentives Redner has managed to maintain a low shrinkage percentage. The awareness is motivated with employee incentives towards the departments that achieve the target. Its standard shrinkage is 0.5%. the difference from the budgeted is paid back to the employees of the improved stores; thus employees earned $590 000 in annual bonuses for beating the target.

Beck A(2011) carried out a case study on Company X based in the United Kingdom. The company wished to remain anonymous. Planet Retail (2010) reported that company X contributes an excess of $60 billion to the UK turnover; comprising of 2500 stores. Stores to the number of 104 from Company X were studied and results presented in 2008. The study was based on the comparison of 66 critical security risk stores who had Self-Scan Checks-outs (SSC) and 38 that did not implement SSCs.

Company X showed that there was no effective change on shrinkage between the companies that implemented SSCs and those that did not. The shrinkage results did not change significantly pre and post installation of the SSCs. One logical explanation of introducing this technology was that customers are less likely to non-scan than employees thus reducing shrinkage; however this appears not to be the case. This
therefore raises suspense on the risks associated with the SSC environment and how customers perceive it.

2.6 Summary
Abnormal shrinkages are caused mainly by employee theft, shop lifting, administrative errors and vendor fraud as cited in the literature review. Loss prevention programs which focus on inventory are also mentioned in the literature review as a strategy of reducing abnormal shrinkage. The next chapter will look at research methodology.
CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction
This chapter gave information about the research methodology through which data was collected and the general philosophies upon which the collection and analysis of data were based. It gave a detailed analysis of this study’s research design, population, and sampling, sampling techniques, sampling procedure and data collection methods to be used in the gathering of data for the compilation of this report as well as the data presentation procedures to be employed in the analysis of the gathered data. The chapter ends with a summary of the research methodology.

3.1 Research Design
[Mytton (2007) defined research design as the guidance of data collection via basic design. It is a broad framework which specifies the type of data to be collected, the source of the data and data collection procedure. A number of research designs exists that may be used in the study including descriptive survey, experimental design, correlation research design, historical research design and case study approach. The researcher used the case study approach which determines the nature of situations existing at the time of the study. Yin (2009) defines case study as an empirical investigation into contemporary phenomenon operating in a real-life context. The study used primary and secondary data to investigate the OK Zimbabwe Limited at branch level especially Bon Marche and the overall group.

3.2 Population
Population is all possible observations in a study contained in a set of data (Wagner 2010:80). Gray (2009:148) also defined a population as the total number of possible units or elements that are included in the study. The target population consisted of the Finance Department at Head Office, Branch Managers, Branch Accountants, document controllers and the shop workforce.
3.3 Sampling
Wagner (2007:122) defined a sample as a selected group from the population under research. It is a representative part of a population taken to show what the rest are like. Sampling is therefore a representative of the entire population used for analysis of the study and gave recommendations to the results obtained.

3.3.1 Sample Size
A total of 5 interviews and 30 questionnaires were used in to gather information from the head office and Bon Marche branches.

Table 3.1 Population and Sample Size

<table>
<thead>
<tr>
<th>Department</th>
<th>Population</th>
<th>Sample Size</th>
<th>%</th>
<th>Interviews</th>
<th>Questionnaires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>11</td>
<td>7</td>
<td>63.64</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Accounting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bon Marche Branches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>8</td>
<td>8</td>
<td>100</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Non-managerial</td>
<td>8</td>
<td>8</td>
<td>100</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Shop floor</td>
<td>40</td>
<td>20</td>
<td>50</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>43</td>
<td>64.18</td>
<td>5</td>
<td>38</td>
</tr>
</tbody>
</table>

3.4 Sampling Technique
The sampling technique used by the researcher was determined by the information required in the study. The study was conducted using random sampling which is a probability sampling technique. All units in a population had a chance to be selected. The research population used included the Finance Department, Management Accounting department Head Office, Management department in the branches and the branches workforce.

The sample provided more reliable and useful information. It enabled the researcher to gather representative information from top management, middle management and shop floor workers.
3.5 Data Collection Techniques
There are two types of data collection techniques, namely primary data collection and secondary data collection Daniel and Sam (2011:111). The research employed both primary data and secondary data techniques.

3.5.1 Primary Data
Wrenn, Stevens and Loudon (2007:94) defined primary data as first time collection of data. The researcher can gain data by direct, detached observation or measurement of phenomena in the real world, undisturbed by any intermediary interpreter (Walliman 2005:242). Primary data was used because the data was very useful and direct, thus meeting the exact needs of this work, data was assumed to be very recent thus making the research more objective. The data was also presumed to be reliable to use as it came directly from the various parties involved and due to the nature of the data, which was first hand detail.

Heselhaus (2010:47) cited that there are usually three main categories in primary data collection; these include observations, questionnaires and interviews. The researcher used personal interviews and questionnaires to conduct the research study. This enabled great control towards the specific research issues to be addressed as the researcher controlled the research design to fit the needs of the study. However data collection was time consuming and had to be processed before it became more useful.

3.5.2 Secondary Data
Secondary data is data which have already been collected by someone else and have already been passed through certain processes (Daniel and Sam 2011:11). It is data which have been subjected to interpretation (Walliman 2005:242). Such data are cheaper and more quickly obtainable than the primary data and also may be available when primary data cannot be obtained at all.

Secondary data proved to be economical and saved time, efforts and expenses for the researcher. It helped primary data collection to be more specific as it pointed to the gaps and deficiencies of the study and what additional information had to be collected. Understanding
of the problem was improved and a basis of comparison for data that was collected was employed.

The researcher assessed OK Zimbabwe Annual Financial reports (2009-2013), OK Zimbabwe Board Reports (2010-2013) and the OK Zimbabwe Mancom Reports (2010-2013). However the data may not answer the study’s research questions with precision. The researcher also did not have control towards how the data was collected and processed making it vulnerable to bias.

3.6 Research Instruments

According to Bax (2013) a broad range of research instruments are used from questionnaires to interviews to discussion groups. The information used in this project was elicited from the respondents through engaging in-depth interviews and questionnaires.

3.6.1 Questionnaires

According to Gray (2009), a questionnaire is a research tool in which people are expected to respond to a set of similar questions drafted by the researcher. He further argues that while it may seem an easy task, much effort has to be placed to ensure the validity and the reliability of the information gathered as well as to maintain the objectivity of the questions.

The design of the questionnaires was based on the research objectives and research questions. The principle of clarity and precision were closely adhered to so as to avoid loaded questions. Questionnaires were chosen as a research tool for this study because they were cheaper and easier to administer in limited time. They allowed the researcher to guide participants along lines of thought with the regard to abnormal shrinkage drivers. The questionnaires enlisted respondent secrecy and privacy leading to honest answer. The data provided by questionnaires was easy to analyse and interpret.

Questionnaires are versatile, allowing the collection of both subjective and objective data through the use of open or closed format questions. Open format questions are those that ask for unprompted opinions. There are no predetermined set of responses, and the participant is free to answer however he/she chooses. Closed format questions usually take the form of a
multiple-choice question. They are easy for the respondent as they give the respondent sufficient choices that cover the range of answers. Anonymity enabled the respondents to give honest answers to sensitive questions.

3.6.1.1 Closed Questions
Kumar (2011:151) argued that closed format questions have respondents’ answers limited to a fixed set of responses. Closed format questions were used in this study. Closed format questions offered many advantages in time and money as they were not time consuming compared to open questions. They made it easier to track opinion over time by administering the same questionnaire to different but similar participant groups at regular intervals. Finally closed format questions allowed the researcher to filter out useless or extreme answers that might occur in an open format question.

3.6.1.2 Likert Scale
According to Bertram (2014:1) a Likert scale is a psychometric response scale primarily used in questionnaires to obtain participant’s preferences or degree of agreement with a statement or set of statements. Likert scale is a scale consisting of a list of statements, the person answering is asked to make judgement on every question or statement (Nisbet, Entwistle, McQuillin and Robinson 2005). The researcher used the following scale for the study as shown in Table 3.2.

Table 3.2 Likert Scale

<table>
<thead>
<tr>
<th>Response</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>5</td>
</tr>
<tr>
<td>Agree</td>
<td>4</td>
</tr>
<tr>
<td>Unsure</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1</td>
</tr>
</tbody>
</table>

3.7 Interviews
According to Gray (2009), an interview is a conversation between two peoples in which one has the role of the researcher. The researcher/interviewer will have a set of questions which
will be laid out in such a manner that they are either structured or unstructured questions. Kumar (2011) stated that interview method enables the researcher to clarify points which are unclear in the structured questionnaire via face to face verbal exchange hence the interview method complimented the questionnaire method of data collection used by the researcher. Interviews held were fruitful as they enabled the researcher to get immediate responses from the interviewee. In depth probing using a flexible language ensured that the questions were understood by the respondent hence accurate data was obtained.

Structured interviews were used as well as open-ended interviews. Open-ended interview questions refer to respondents’ opinion about events. In a focused interview the researcher followed certain set of questions derived from the conceptual framework of the case study. This guarded the interviewer against misinformation and distortion of facts and opinions. The researcher prepared an interview guide which was used at the Head Office and Bon Marche branches under study.

3.8 Validity and Reliability

3.8.1 Validity
Monoharan (2010:25) argued that an instrument is valid when it measures what it intends to test. The validity of the instruments was tested by passing them to other people so that they could identify any errors on them to see their appropriateness. After finding errors and correcting them, the questionnaires were then passed to respective individuals to fill in.

3.8.2 Reliability
The correction of errors in the questionnaires before administering them enabled the researcher to remove ambiguities and vagueness that may have existed in the research instruments. The study questionnaires and the interview questions were thoroughly reviewed before administering them.

3.9 Data Presentation and Analysis
According to Silverman (2004), qualitative data refers to the information that incorporates reflections on the human behaviour, causes of actions and reasons for such behaviour and cause of action. It details out an investigation on the why and how of things not just the where, what and when.
Quantitative data is data that is numerical in nature. It is developed and employed from mathematical or statistical models (e.g. regression analysis), theories and/or hypotheses pertaining to phenomena. The process of measurement is central to quantitative data because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships (Bryman and Crammer 2001).

The study was analysed using pie charts, graphs, tables, text and interview summary. Graphical presentations were exploited to further elaborate the results as they are easily displayed and interpreted. Tables were used because of their effectiveness in summarised data presentation.

3.10 Summary
This chapter looked at the research methodology used by the researcher to gather information. A descriptive case study research design was used to carry out this study with the use of questionnaires and interviews as data collection tools. Both qualitative and quantitative data presentation was employed in the study. The next chapter will focus on data presentation and analysis. It will show the results of the research carried out through questionnaires and the interviews.
CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.0 Introduction
This chapter presents a synthesis of the findings from the survey through the use of questionnaires interviews and secondary data as research tools. Data findings are presented, analysed and interpreted as they relate to the theory that underlies the study. Data is analysed from the findings obtained through self-administered questionnaires and interviews. Both quantitative and qualitative means of analysis will be employed by means of tables, graphs, pie charts, explanatory notes to aid interpretation and summary of interviews. Chapter summary will conclude the data presentation and analysis chapter.

4.1 Analysis and responses to questionnaires
A total of 38 questionnaires were sent out to the Head Office and Bon Marche branches. Table 4.1 illustrates how the questionnaires were administered and their respective responses.

Table 4.1 Responses to questionnaires

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Sample</th>
<th>Responded</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Office</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management accounting</td>
<td>4</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Bon Marche Branches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>6</td>
<td>6</td>
<td>100</td>
</tr>
<tr>
<td>Non-managerial/clerks</td>
<td>8</td>
<td>7</td>
<td>87.5</td>
</tr>
<tr>
<td>Shop floor</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>38</td>
<td>37</td>
<td>97.4</td>
</tr>
</tbody>
</table>

Source: Raw Data
Out of the 38 questionnaires that were administered 37 were responded. The response rate of 97.4% was quite significant enough to justify the study and therefore gave credibility to the findings that were presented and discussed thereafter.
4.2 Analysis and Presentation of responses to Questions

This section of the study seeks to analyse together the data so obtained through the use of questionnaires. A question-to-question approach to the data analysis will be undertaken. The respondents from OK Zimbabwe Ltd were issued with a questionnaire to respond basing on their own independent mind and assessment of each question.

4.2.1 How long have you been working at OK Zimbabwe Ltd?

The time in which an individual has been employed at an organisation can ascertain the experience of the individuals. Table 4.2 and Figure 4.1 illustrate the length of time in which employees have been at OK Zimbabwe Ltd.

Table 4.2 Period employed at OK Zimbabwe

<table>
<thead>
<tr>
<th>Response</th>
<th>Less 5 years</th>
<th>5-10 years</th>
<th>10+ years</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>20</td>
<td>11</td>
<td>6</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.1 Period employed at OK Zimbabwe Ltd

More than half of the population sample, 54% has been employed at OK Zimbabwe Limited for less than 5 years hence they have a minimum experience at the firm. Those who are more familiar with the organisation and may have a deeper understanding of the policies and how
to conduct their work more effectively include a 30% of those employed at OK Zim for 5-10 years and 16%, 10+ years.

4.2.2 Fridge failures occur more often in branches leading to markdowns.
The question was administered to assess the level at which fridge failures will lead to an increase in shrinkage in departments that are dependant more in fridges and for the administration to account for the losses due to fridge failures to give a fair shrinkage calculation. Table 4.3 and Figure 4.2 illustrate the findings.

**Table 4.3 Fridge failure occurrences leading to markdowns**

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>8</td>
<td>7</td>
<td>11</td>
<td>10</td>
<td>1</td>
<td>37</td>
</tr>
</tbody>
</table>

**Figure 4.2 Fridge failure occurrences leading to markdowns**

Overall 59% (unsure, disagree and strongly disagree) disagreed that fridge failures occurred more frequently at the Bon Marche Branches. While 41% agreed that there was an increase in markdowns due to fridge failures. The interview responses indicated that 60% of the respondents were impartial thus they disagreed, whilst 40% agreed that fridge failure
occurred more in the Bon Marche Branches leading to excess in the unaccounted for loss. The Buyer’s Markdown/markup Report (2010) commented that increase in markdowns was due to fridge failures caused by load shedding.

4.2.3 There is high percentage breakages in the liquor department especially Bon Marche.

The statement sought to establish the impact of breakages in the groceries department due to liquor and to what extent it would lead to high inventory losses, see Table 4.4 and Figure 4.3.

Table 4.4 Breakages in liquor department

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>0</td>
<td>11</td>
<td>9</td>
<td>7</td>
<td>10</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.3 Breakages in liquor department

The respondents up to 70% (unsure, disagree and strongly disagree) viewed liquor breakages not to be high whilst 30% agreed that there were high. The interview response rate of 100% was of the view that, though breakages occur they are were not significant in the branches.
4.2.4 Stock take durations take longer than the budgeted time they should take.
The posed the question to seek whether or not the branches adhere to the stipulated time given for inventory count. OK Zimbabwe Business Policy Guide (2012) cited that Branch Managers had to send stock take valuation reports to the Finance Manager not more than three days after the date of stock take. Table 4.5 and Figure 4.4 illustrate the findings.

Table 4.5 Inventory count duration

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>11</td>
<td>7</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.4 Inventory count duration

According to 89% (unsure, disagree and strongly disagree) of the respondents and 60% of the interview response, the inventory count time is adhered to in collaboration with the budget. However 11% and 40% of the interview respondents agreed that stock takes took more time than anticipated.

4.2.5 After service check points like security guards help to deter theft.
The researcher stated the statement to assess if the use of security services after the point of sale would help to deter theft, collusion and fraudulent behaviours within the branch. The
security guards also assess the items that are on the receipts and the goods held in hand by the customer. The responses of the study are shown in Table 4.6 and Figure 4.5.

Table 4.6 After service check points

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>6</td>
<td>26</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.5 After service check points

Majority of the respondents (86%) view security guards as a measure that helps to deter fraud and theft in retail shops however 14% of them disagree. The interviews also gave a positive response in that security guards help deter theft however they cited a weakness in that a few are prone to collusion and cause internal theft. Levy and Weitz (2012) cited that loss prevention requires co-ordination between store management, visual merchandising and store design. Security guards may therefore be used as a visual aid in the retail shops.
4.2.6 Installation of CCTVs helps monitor suspicious activities which may lead to fraudulent activities.

The objective of the statement was to assess how the respondents view the effectiveness of the CCTVs in their working areas. Also how much they would help to prevent theft by monitoring suspicious activities before they actually occur see Table 4.7 and Figure 4.6.

Table 4.7 Suspicious activities monitored by CCTVs

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>10</td>
<td>19</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.6 Suspicious activities monitored by CCTVs

More than half of the respondents (51%) agreed that CCTVs help to monitor suspicious activities in the shops. These were fully supported by a 27% response which strongly agreed to the same. However 22% (disagree and unsure) did not perceive the positive impact of CCTV installation. The interviewees argued that though CCTVs help deter theft, all the monitors are not watched at the same time focus is made on a particular monitor for a particular time which may result in unnoticed theft. According to Shinde (2012) shoplifters...
require privacy, thus CCTV installations should target the “blind spots” to effectively monitor all the activities including those that are not visible to the eye.

4.2.7 Low income wage rates and salaries may lead to collusion and fraud.

This fact was poised to ascertain whether the total salaries or wages that are received by the employees contribute to their behaviour towards theft, fraud and collusion. The responses established are shown in Table 4.8 and Figure 4.7.

Table 4.8 Low income may lead to collusion and fraud

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>5</td>
<td>17</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.7 Low income may lead to collusion and fraud

More than half, 59% (strongly agree and agree) of the target population responded positively in that low income wage and salary rates may lead to employee theft and fraud and collusion with the suppliers. However 41% responded negatively to the statement. Majority of the interviewed employees agreed that low income wages may contribute to inventory theft and collusion. According to the Global Retail Theft Barometer (2011), living standards have often
been curtailed by curbs on salary decreases, inflation and short working hours leading to external and internal theft.

4.2.8 Employee awareness about shrinkage will help employees to participate towards reducing shrinkage.

The objective of the statement was to determine if employees perceived a positive change if there were to be made aware of high shrinkage percentages and its impact towards the company and how consequently it would affect them. The respondents responded as shown in Table 4.9 and Figure 4.8.

Table 4.9 Reduction of shrinkage through employee awareness programs

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>15</td>
<td>7</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.8 Reduction of shrinkage through employee awareness programs

Employees responded positively towards employee awareness programs as a measure that reduces high shrinkage percentages; thus 40% strongly agreed and 19% agreed. 27% were not sure how such a program would help them and 14% disagreed to the fact that the program would help employees reduce shrinkage in their respective Bon Marche shops.
Zimmerman in Levy and Weitz (2012) rated that Redner House Markets, has one of the industry’s lowest inventory shrinkages, 0.16% of sales. Redner achieved this low shrinkage by educating its employees about the causes and effects of shrinkage on the business. Then it backs the message with incentives.

4.2.9 Gathering of data and information used for shrinkage calculation is cumbersome and prone to mistakes.

The statement was asked so as to ascertain how data collection and processing would have an impact on administrative calculations and errors. Cumbersome work tends to be more prone to errors due to fatigue of the employees. Table 4.10 and Figure 4.9 demonstrate the findings from the employees.

Table 4.10 Shrinkage information collection is cumbersome and prone to mistakes

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>0</td>
<td>13</td>
<td>15</td>
<td>4</td>
<td>5</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.9 Shrinkage information collection is cumbersome and prone to mistakes

- Strongly Disagree, 14%
- Disagree, 11%
- Unsure, 40%
- Agree, 35%
- Strongly Agree, 0%
A sample of 40% was indifferent towards the data and information collection used for shrinkage calculation and whether it is prone to mistakes and cumbersome. Nevertheless 35% agreed that it was cumbersome and prone to mistakes whilst 14% strongly disagreed and 11% disagreed. Therefore 65% differed that shrinkage information collection is cumbersome and more prone to mistakes whilst 35% approved.

4.2.10 The computer system for inventory data capture is fast and reliable and up to date.

This statement was asked to assess the effectiveness of the computer system when capturing and recording all inventory transactions. The responses of the employees are shown in Table 4.11 and Figure 4.10.

Table 4.11 Reliability of computer system for inventory data capture

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>0</td>
<td>13</td>
<td>5</td>
<td>19</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>

Figure 4.10 Reliability of computer system for inventory data capture

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>
The computer system at Bon Marche branches is not fast, reliable and up to date according to 51% of the respondents though 35% agreed to its reliability and 14% were unsure. Hence 86% total view the computer system to be slow, unreliable and out of date. The respondents of the interviews (80%) also argued that the computer system used at the branches proved to be slow at some instance thus it became unreliable. www.retail.com (18/03/14;05:15) argued that integrating people, processes and technologies into a holistic strategy is the best way to tackle abnormal shrinkage. He further cited that workflow application systems automatically analyse the data in real time producing critical shrink-related results.

4.2.11 The criteria used to calculate shrinkage percentages give fair and accurate results.

The objective was to ascertain the extent to which administrative calculation errors may lead to increased shrinkages due to the calculation criteria. Also it set to find out the fairness and accurateness of the calculated shrinkages after data collection and processing, see Table 4.12 and Figure 4.11.

Table 4.12 Shrinkage calculation criteria

<table>
<thead>
<tr>
<th>Response of respondents</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>9</td>
<td>18</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>
The respondents strongly agreed and agreed (24%;48% respectively) that the calculation criteria used for shrinkage calculation gives fair and accurate results though 14% were uncertain and 14% disagreed to that fact thus 28% in total responded negatively. The interview summaries suggested that calculation and results of shrinkage undergo intense review thus the final results are highly unlikely to be prone to mistakes.

4.2.12 Installation of scanning machines at the point of sale helps to update the sale immediately.

The question was posed to determine the impact of point of sale (POS) technology in the retail. It sets to ascertain whether or not sales ledger was updated immediately to avoid fictitious sales from being updated into the system which increases unaccounted loss. The respondents’ views are as illustrated in Table 4.13 and Figure 4.12.

Table 4.13 Updating of sale through POS technologies

<table>
<thead>
<tr>
<th>Response of respondents</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>0</td>
<td>10</td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>37</td>
</tr>
</tbody>
</table>
According to 73% a sum of those who were unsure, disagreed and strongly disagreed, sales are not immediately updated into the ledger at the point of sale. They are just updated at the operating till machines. Conversely 27% agreed that they are immediately updated. The interview respondents (100%) argued that sales ledger is not immediately updated at the POS. The data is just captured then the sales master file is updated at the end of the day.

4.2.13 Fruit and Vegetables go bad quickly leading to markdowns or throwing them away which increases shrinkage percentages.

The objective of the statement asked was to ascertain the extent to which the Fruit and Vegetables department may have high unaccounted for losses due to spoiled inventory. Fruits and vegetables are marked down and recorded for however failure to record the markdowns has an impact on shrinkage as it increases. Table 4.14 and Figure 4.13 demonstrate the findings.

<table>
<thead>
<tr>
<th>Table 4.14 Fruit and Vegetables spoilage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Response</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Number of respondents</td>
</tr>
</tbody>
</table>
According to 49% of the respondents agreed that fruit and vegetables go bad quickly and lead to markdowns or throwing away which may increase shrinkages. Altogether 51% did not agree that losses were caused by markdowns or throwing away of bad fruits and vegetables. Sullivan (2014), argued that loss prevention may spend time and money guarding against theft though it may not be the cause of shrinkage in that department. Spoilage of goods has to be accounted for unaccounted loss.

### 4.2.14 Hiring of external stock takers may lead to inventory theft.

The statement asked intended to establish the impact that external stock takers have on inventory theft. These individuals were hired only for a specific time and purpose. The Branch Manager is expected to hire staff required to carry out stock take according to the Business Policy Guide (2011). Table 4.15 and Figure 4.14 elaborate the responses of the employees.

**Table 4.15 Hiring of external stock takers**

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of respondents</td>
<td>0</td>
<td>13</td>
<td>2</td>
<td>22</td>
<td>0</td>
<td>37</td>
</tr>
</tbody>
</table>
Hiring of external stock takers does not lead to inventory theft according to 60% of the respondents whereas 35% agreed that they lead to theft and 5% of the respondents were uncertain.

4.2.15 Incorrect counting of stock which consists of small items like sweets, cigarettes, razor blades may lead to biased shrinkages in the respective departments.

The aim of the statement was to ascertain the impact that incorrect counting has on shrinkage calculation. Also to evaluate how each department with the respective small items would be affected with inventory counting. Table 4.16 and Figure 4.15 elaborate the findings.

Table 4.16 Increase of shrinkage due to incorrect inventory counting

<table>
<thead>
<tr>
<th>Response</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of respondents</td>
<td>11</td>
<td>16</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Altogether 73% strongly agreed and agreed that incorrect counting of inventory may lead to biased shrinkages which may be higher or lower whereas 27% were unsure of the impact of incorrect inventory counting they disagreed.

4.3 Analysis and responses to interviews

The targeted 5 interviews (3 at Head Office and 2 at Bon Marches) were successfully held. All the management personnel responded with great confidence. The 100% response added to the credibility of the research findings.

4.3.1 To what extent do the drivers of shrinkage such as shoplifting, employee theft, administrative errors and vendor fraud lead to shrinkage?

Abnormal shrinkage was defined as unexplained excessive loss of stock (60% of the interviewees). All of the respondents agreed that shrinkage was mostly a people problem. The major causes of shrinkage (about 95%) being due to employee theft, fraud and collusion (members of staff and suppliers). However they are other factors which led to abnormal shrinkages including; customer theft, incorrect processing of transactions, poor documentation, short supply, incompetence of managers to adhere to stock take procedures and incorrect counting of inventory.
From the questionnaires (4.2.7) 59% agreed that low income wages and salaries contributes as a driver to inventory theft which leads to abnormal shrinkages. Fictitious sales may also lead to a hyper increase in the unaccounted for loss. According 73% of questionnaire (4.2.12) respondents to sales are not immediately updated at the POS.

Bamfield (2012) commented that people will steal just about anything depending on the steal ability of the product, the personal rate of return to the thief and the inequity. Global Retail Theft Barometer (2011) cited that from Africa shoplifting constituted more loss towards shrinkage, thus 37.2% followed by employee theft 36.2%, internal error has 18% and vendor fraud contributes 8.6%.

4.3.2 What impact do departmental shrinkages have on the overall branch shrinkage?
According to all of the respondents shrinkage is directly related to sales. The higher the sales the higher the shrinkage may become. The Dry Groceries department contributes 60%-70% of the total company sales according to the company’s aggregated sales report (2010, 2011, 2012). Shrinkage is likely to be higher in that department in proportion to sales. However 0.5% of sales in every department were the acceptable departmental shrinkage which is then aggregated and averaged to come up with the overall branch shrinkage.

Levy and Weitz (2012) orated that, shrinkage varies by department and season. Typically if the department for hardware increase their sales by 10%, then retail can expect a 10% increase in their shrinkage for the period. Liquor department does not have high breakages which contribute to abnormal shrinkage in the dry groceries department according to 70% of the respondents (4.2.3). Incorrect counting of inventory for small items like sweets, cigarettes and razor blades leads to biased shrinkage to the respective departments 73% of questionnaire respondents agreed to this fact (4.2.15).

4.3.3 What impact do internal errors made when calculating inventory have on shrinkage?
100% of the respondents agreed that it is highly unlikely that errors due to calculation go undetected. Shrinkage calculation sheets go under two levels of review before the results are passed on to the branches. The Finance Manager Planning and his assistant each reviews the shrinkages on a separate basis and different method to ensure the fairness and accuracy of the
results. Bon Marche branch computation performance also go under review by the Branch Managers before they are submitted to the Head Office for calculation. Moreover artificial shrinkage is detected immediately by the system.

The OK Zimbabwe Business Guide Policy stipulates that all inventory count information are submitted to the Finance Manager within 48 hours of stocktake to ensure immediate shrinkage calculation which is intensely reviewed for errors by two top management personnel before they proceed to the information users.

The calculation criteria used in shrinkage calculation in response to 72% (4.2.11) of the questionnaires also agreed that the results given were fair and accurate though 65% (4.2.10) disagreed that the computer system used was fast, reliable and up to date hence the shrinkage results may not be timeous and reliable at the time they are produced. The University of Florida (2012) study commented that by focusing on theft related sources, retail companies are ignoring pockets of poor policies and processes as well errors in which shrinkage germinates and grows.

4.3.4 What strategies can be implemented to manage abnormal shrinkage?

All the interview respondents perceived that the installation of CCTV’s may act as a deterrent towards inventory theft. However they also cited weaknesses as the monitor of the TV can monitor one or two monitors at a time whereas theft may be happening at the stations he/she was not focused on at the time of crime. Also they may be used in a collusive manner and help customers and employees to steal. The cameras may also malfunction at a critical moment.

Installation of CCTVs helps to monitor suspicious activities which may lead to fraudulent activities in the Bon Marche store according to 76% of questionnaire respondents (4.2.6). Mawson (2009) argued that many retailers focus on theft and spending large amounts of money on CCTV security systems, when the main issue lies in poor process systems. Process failure drags abnormal shrinkage and no one knows were the loss amounts have gone.

http://www.ukessays.com/essays/business/retail-industry-consumer.php (19/03/14; 05:05) cited that the barrier to technology adoption strategies is the high costs associated with the purchasing, installation, implementation, development and maintenance.
Monthly stock takes may act as a strategy used to manage inventory, if it was not done inventory may be lost. It also enabled a continuous touch with the Bon Marché’s inventory. Monthly inventory counts helps to detect transaction related shrinkage. Cyclical counts may be implemented to manage abnormal shrinkages. Each department will have a departmental supervisor who checks the physical stock and the system stock and investigate were there are abnormal differences.

The respondents also agreed that the use of security guards as after sale check points may help to deter theft. Branch Managers should also review all procedures within a branch and align them to the acceptable branch procedures. The employees 86% from questionnaires (4.2.5) also viewed security guards as a useful tool in managing abnormal shrinkage due to theft. A holistic approach in which the shrinkage committee educate the employees about the impact of abnormal shrinkage may be employed to manage it. Konstantinou and Kokkinos (2012) argued that in order to reduce shrinkage retailers have to take a holistic approach in eight steps illustrated in Chapter 2 figure 2.4.

4.4 Secondary Data

Shrinkage drivers

Branch Managers, according to the OK Business Guide (2012), are to submit inventory valuation reports of the inventory count to the Head Office Management Accounting Department not more than 72 hours after stock take to prevent manipulation of the original data. Though 89% and 60% of the questionnaire and interview respondents agreed that the inventory count time was adhered to, 11% and 40% respectively viewed it other ways.

Departmental Shrinkage

The Sales Report (2010, 2011, 2012) reported that shrinkage is directly related to sales and 0.5% of the sales is the acceptable shrinkage for every department which is then aggregated and averaged to give the branch total shrinkage. The actual shrinkage is compared with the budgeted shrinkage to analyse the performance of the branches. The interviewees agreed that the higher the sales the higher the shrinkage amount for the respective departments. Liquor department according to 70% of questionnaire respondents, disagreed that there are high breakages contributing to abnormal shrinkages.
Administrative Errors
According to the OK Zimbabwe Full Year End Results Presentation to Analysts (2013) in-house IT system has kept the company at edge and the development of web stores in the Bon Marche branches allows for the integrating and control of all store processes and operations. This has led to the effectiveness and efficiency of the system however 65% and 80% of the questionnaire and interview respondents respectively were of the view that the computer system used in the Bon Marche branches is not fast, reliable and up to date.

The shrinkage percentage results for the different quarters according to the OK Zimbabwe Board Reports (2010, 2011, 2012) are given in table 4.17

Table 4.17 Shrinkage Percentages Quarterly Against a Standard of 0.5%

<table>
<thead>
<tr>
<th>Branch</th>
<th>1st Quarter (F13)</th>
<th>Variance (F13)</th>
<th>2nd Quarter (F12)</th>
<th>Variance (F12)</th>
<th>3rd Quarter (F11)</th>
<th>Variance (F11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowdale</td>
<td>1.31%</td>
<td>0.81%</td>
<td>1.15%</td>
<td>0.65%</td>
<td>2.23%</td>
<td>1.73%</td>
</tr>
<tr>
<td>Avondale</td>
<td>3.10%</td>
<td>2.60%</td>
<td>1.48%</td>
<td>0.98%</td>
<td>0.90%</td>
<td>40.00%</td>
</tr>
<tr>
<td>Chisipite</td>
<td>1.77%</td>
<td>1.27%</td>
<td>1.04%</td>
<td>0.55%</td>
<td>1.44%</td>
<td>94.00%</td>
</tr>
<tr>
<td>Mt Pleasant</td>
<td>1.10%</td>
<td>0.60%</td>
<td>1.57%</td>
<td>1.07%</td>
<td>2.20%</td>
<td>1.70%</td>
</tr>
</tbody>
</table>


The different quarters for the different year’s shows that the shrinkage percentages for the Bon Marche branches were abnormal hence the calculation criteria used is less prone to errors. The variances from the company standard were extremely high though out the year’s quarters. All the interview respondents approved that shrinkage calculation results undergo intense review so as to eliminate any errors due to calculation. The questionnaire respondents (72%) established that the calculation criteria used for shrinkage calculation gives fair and accurate results.

4.5 Summary
The chapter provided the analysis and data presentation of the findings of the study. This was done using tables, graphs, pie charts, descriptive summarised explanations and interview summary. The following chapter will focus on the conclusions and the recommendations which OK Zimbabwe Limited may implement to reduce abnormal shrinkages at branches especially Bon Marche.
CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction
The preceding chapter discussed data analysis and presentation of the findings of the study. The findings were based on the objectives in Chapter 1. This chapter will draw its attention on the chapter summaries of the research study. It also draws conclusions on the outcomes of the research. The researcher also gives recommendations to manage and reduce abnormal shrinkage at OK Zimbabwe especially Bon Marche branches. The chapter is concluded with a chapter summary on significant areas for further research.

5.1 Summary of the research study
Chapter 1 presented the background of the study. It sought to present the research objectives, main research question and sub-research questions and the statement of the problem. The chapter also covered the significance of the study, delimitations, assumptions and definition of terms used in the research study.

Chapter 2 looked at the comprehensive analysis of the major objective of the factors leading to abnormal shrinkage. The researcher used various literature sources to gain a wide range understanding of the research topic. The authoritative points, theories and concepts of research given by accredited scholars and journals enabled the researcher to view the gaps related to the study and to build a base line for recommendations. Levy and Weitz (2012), the Global Retail Theft Barometer (2009-2012) and Bamfield (2011) were the prominent authors and reports used in the study.

Chapter 3 gave an eloquent presentation of the research methodologies employed in data gathering and presentation. It concentrated on the research design, population, sampling, sampling techniques, sampling procedure and data collection procedures. A descriptive case study research design was used to carry out the study. Data collection was mainly done by administering questionnaires and conducting interviews.
Chapter 4 analysed and presented the research findings of the study. The data findings were analysed, presented, interpreted and evaluated in relation to the literature and secondary data under study. Both qualitative and quantitative means of analysis were used in presenting data. These included table, graphs, pie charts, explanatory text and interview summary.

5.2 Major Findings

5.2.1 Examine the Drivers of Abnormal Shrinkage such as theft, fraud and collusion

- Shrinkage is a people related problem and internal theft is predominant in the Bon Marche branches.
- Fraud and collusion among employees, customers and suppliers play a significant role towards theft of inventory leading to high shrinkages.
- Low income wages was an indicator of leading especially employees into crime.
- Administrative errors were prone to increase due to slow, unreliable and out of date computer system used at the retails.

5.2.2 Analyze Departmental Shrinkage Percentages in Branches

- Departmental sales are directly related to shrinkage amount though the percentage has to remain at 0.5% of sales regardless the different sales figures in all departments.
- Liquor department has low breakage recordings hence shrinkage in the dry groceries is reduced.
- Incorrect counting of inventory in their respective departments led to abnormal shrinkage.

5.2.3 Examine Administrative Errors made when Calculating Shrinkage

- The criterion used for the calculation of shrinkage was reasonably accurate and gave fair results.
- Much focus is concentrated on abnormal shrinkage caused by theft and internal errors and administrative errors are processes left with little or no attention.
- The internal processes especially the computer system used to capture the data used to aid calculation is slow, unreliable and not up to date.
5.2.4 Suggest Strategies to Manage Abnormal Shrinkages

OK Zim employed physical and technical strategies in managing abnormal shrinkage in their stores especially Bon Marche. The strategies include:

- The installation of CCTVs though much concentration will be on one monitor since a single personnel is employed to monitor all the television monitors at the same time.
- Scanning machines at POS
- Security guards,
- Monthly stock takes and
- Departmental regular stock count.
- The company also has a shrinkage committee at each branch. This committee has moderately had an effect to the employees towards the management of abnormal shrinkage.

5.3 Conclusion

The research was successful as the researcher was able to answer the main research question: “What are the factors contributing to abnormal shrinkage percentages in the branches especially Bon Marche?” The literature review, findings of the data collection and secondary data helped in the assessment of the abnormal shrinkage drivers, departmental shrinkages, administrative calculation errors and the strategies to manage abnormal shrinkages.

5.4 Recommendations

Holistic Shrinkage Approach

OK Zim Ltd must view shrinkage in a holistic manner were the whole body and all the different sectors and departments in the company are made aware of shrinkage and how best their department can help towards improving and managing abnormal shrinkage. The Loss Prevention (LP) Magazine (2014) commented that for the LP group to really manage abnormal shrinkage effectively it needs a minimum representatives from the finance, inventory control, merchandising/buying, distribution, IT, customer service and human resource organisations in its camp and focused on the issue. It can also employ the 8 steps as mentioned by Konstantinou and Kokkinos (2012) in Chapter 2 figure 2.4.
Employee benefits
The company must also increase the wages and the salaries of the employees in accordance with the cost of standard living in Zimbabwe. The Global Retail Theft Barometer (2011) commented that decreases and short working hours led employees theft behaviour to increase thus retailers should also focus on maintaining the poverty datum line when preparing employee wages and salaries.

Computer application systems
The researcher also recommended the company to update its computer system so that it becomes fast and more reliable. According to www.retail.com (18/03/14;05:15) the use of core systems enables the consolidation of all sources of shrink related data into one warehouse. Information becomes more accurate and timely by middleware applications which give retailer managers a comprehensive unified view of shrink-related-data.

Personnel monitors of CCTVs
Two or three CCTV monitoring personnel must be put in place so as to have a wide spread coverage of all the angles showing up on the monitoring screens. According to McGrane (2008) though CCTV cameras are effective if only one personnel is employed to monitor the stores departmental activities on numerous monitors, focus will be on one department at a time. Thus theft may immediately go unnoticed in another department.

Disguised customers
The Bon Marche store may employ disguised customers who come into the stores and poise as customers whilst they discretely monitor the behaviour of customers and employees. Employees may be employed discretely to pose as customers whilst observing the both the customers and the employees especially at the point of sale machines. They will check if all the items being purchased have been accounted for at their correct prices (Levy and Weitz 2012).

Security technologies
The organisation may also adopt the use of security technologies according to www.deloitte&touche.com (18/03/14; 05:30) these strategies are being adopted to minimise abnormal shrinkage and they are as follows:
- Point of Sale data mining software.
- Source tagging programs.
- Self-alarming anti-theft tags.

www.retail.com (18/03/14; 05:15) cited that the use of portal technologies which enable retail managers to monitor the shrinkage performance of the store anywhere in the world. The adoption of Radio Frequency Identification (RFID) also contributes to the management of abnormal shrinkage.

**Internal controls**

More diligence should be given towards inventory count control procedures so as to correctly and accurately record and process inventory without affecting the sales figures which are directly related to shrinkage. Mawson (2009) illustrated that retailers need to focus on their internal control and computer systems to minimise the manipulation of electronic data which will lead to online theft of goods.

**5.5 Suggested areas of further research**

This study sought to investigate on the factors leading to abnormal shrinkage percentages at branch especially Bon Marche and company level however further studies can be done on the shrinkage internal control systems and employees’ theft behaviour.
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Secondary data

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OK Zimbabwe Annual Report 2012
OK Zimbabwe Annual Report 2013
OK Zimbabwe Board Report 2011
OK Zimbabwe Board Report 2012
OK Zimbabwe Board Report 2013
APPENDIX A: INTRODUCTORY LETTER

Midlands State University
P Bag 9055
Gweru

14 April 2014

OK House
OK Zimbabwe Limited
7 Ramon Road
Graniteside
Harare

The Human Resource Manager

RE: APPLICATION FOR AUTHORITY TO CARRY OUT A RESEARCH

I hereby seek your permission to carry out a research at OK Zimbabwe using questionnaires and interviews. The research study is in partial fulfillment of Bachelor of Commerce Accounting Honors Degree. I am a 4th year student at the above mentioned university.

I am carrying out a research: “The investigation of abnormal shrinkage drivers in retail at branch level especially Bon Marche and company.” The research is focused on Bon Marche: Avondale, Borrowdale, Chisipite and Mt Pleasant.

Thank you for your assistance

Yours faithfully

Dionie Zhou
Midlands State University
Department of Accounting
Private Bag 9055
Gweru

14 April 2014

Dear Respondent

RE: REQUEST TO RESPOND TO QUESTIONNAIRES.
I am carrying out a research; “The investigation of abnormal shrinkage drivers in retail at branch especially Bon Marche level and overall.” The research study is in partial fulfilment of Bachelor of Commerce Accounting Honours Degree. I am a 4th year student at the above mentioned university.

May you assist me by attending the questionnaires and taking your time in the interviews to be held. Your responses will be held with confidentiality and used for academic purposes only.

Thank you for assistance and your time.

Yours faithfully

Dionie Zhou
APPENDIX C: INTERVIEW QUESTIONS

1. To what extent do the drivers of shrinkage such as shop lifting, employee theft, administrative errors and vendor fraud lead to shrinkage?
2. What impact do departmental shrinkages have on the overall branch shrinkage?
3. What impact do internal errors made when calculating inventory have on shrinkage?
4. What strategies can be implemented to manage abnormal shrinkage?
APPENDIX 2: QUESTIONNAIRES

May you please follow these instructions when answering the questions.

1) Put a tick ( ) in the appropriate box.
2) Your name, mobile number and address are not required.
3) Your responses are held with confidentiality.

1. Which part of the company do you belong to?
   - Head office
   - Bon Marche

2. Which category do you belong to in the company?
   - Managerial
   - Clerk
   - Shop floor

3. How long have you been working at OK Zimbabwe Limited?
   - Less 5 years
   - 5-10 years
   - 10+ years

4. Fridge failures occur more often in the branches leading to mark downs.
   - Strongly agree
   - Agree
   - Unsure
   - Disagree
   - Strongly disagree

5. There is a high percentage breakage in the liquor department in the branch especially Bon Marche.
   - Strongly agree
   - Agree
   - Unsure
   - Disagree
   - Strongly disagree
6. Stock take durations are longer than the budgeted time they should take.

   Strongly agree □ Agree □ Unsure □
   Disagree □ Strongly disagree □

7. After service check points such as security guards helps deter theft.

   Strongly agree □ Agree □ Unsure □
   Disagree □ Strongly disagree □

8. Installation of CCTVs helps monitor suspicious activities which may lead to fraudulent activities.

   Strongly agree □ Agree □ Unsure □
   Disagree □ Strongly disagree □

9. Low income wage rates and salaries may lead to collusion and fraud.

   Strongly agree □ Agree □ Unsure □
   Disagree □ Strongly disagree □

10. Employee awareness about shrinkage will help employees to participate towards reducing shrinkage.

    Strongly agree □ Agree □ Unsure □
    Disagree □ Strongly disagree □
11. Gathering of data and information used for shrinkage calculation is cumbersome and prone to mistakes.

   Strongly agree [ ] Agree [ ] Unsure [ ]
   Disagree [ ] Strongly disagree [ ]

12. The computer system for inventory data capture is fast, reliable and up to date.

   Strongly agree [ ] Agree [ ] Unsure [ ]
   Disagree [ ] Strongly disagree [ ]

13. The criteria used to calculate shrinkage percentage gives fair and accurate results.

   Strongly agree [ ] Agree [ ] Unsure [ ]
   Disagree [ ] Strongly disagree [ ]

14. Installation of scanning machines at the point of sell help update the sale immediately.

   Strongly agree [ ] Agree [ ] Unsure [ ]
   Disagree [ ] Strongly disagree [ ]

15. Fruit and vegetables go bad quickly leading to markdowns or throwing them away which increases shrinkage percentages.

   Strongly agree [ ] Agree [ ] Unsure [ ]
   Disagree [ ] Strongly disagree [ ]
16. Hiring of external stock takers may lead to inventory theft.

- Strongly agree
- Agree
- Unsure
- Disagree
- Strongly disagree

17. Incorrect counting of stock which consists of small items like sweets, cigarettes, razor blades may lead to biased shrinkages in the respective departments.

- Strongly agree
- Agree
- Unsure
- Disagree
- Strongly disagree