# MIDLANDS STATE UNIVERSITY

# **FACULTY OF COMMERCE**

# DEPARTMENT OF RETAIL AND LOGISTICS MANAGEMENT



# THE EFFECT OF SHRINKAGE ON COMPANY PERFORMANCE; CASE OF CHOPPIES SUPERMARKET MKOBA BRANCH

 $\mathbf{BY}$ 

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A DISSERTSTION SUBMITTED TO MIDLANDS STATE UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF RETAIL AND LOGISTICS MANAGEMENT DEGREE.

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# **DEDICATION**

This work is dedicated with love to my grandmother, my family and friends. Thank you for your priceless guidance, financial support, encouragement and great love.

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#### **ABSTRACT**

This dissertation was on the effect of shrinkage on company performance. It meant to analyse how shrinkage is affecting the company as shrinkage has been on the rise since the economic and aggregate demand collapse. The main research objectives were determining the effects of physical stock loss on sales, to determine the effects of process failure on service delivery, establish the effects of value discrepancy on profitability and to determine the effects of intercompany fraud on cost efficiency. Accredited scholars and journals were used to gain explicit understanding of the topic under review. A descriptive research and explanatory research was used to describe and explain how shrinkage affects Choppies superstore performance. For primary data collection; interviews and questionnaires were employed to gather data. The questionnaires distributed were 34 and 32 were answered and returned giving a 94% authentic rating. Interviews booked were 4 and 3 were carried out giving a 75% authenticity rating. Tables and graphs were used to present and analyse data. The results reviewed shrinkage as a true challenge which undermines company performance and all efforts to boost performance.

# **Table of Contents**

APPROVAL FORM	i
DECLARATION	ii
RELEASE FORM	i\
DEDICATION	۱
ACKNOWLEDGEMENTS	v
ABSTRACT	vi
LIST OF TABLES	xi
LIST OF FIGURES	xii
DEFINITION OF TERMS	xiv
Chapter 1	1
General Introduction	1
1.0 Introduction	1
1.1 Background to the Study	1
1.2 Statement to the Problem	2
1.3 Research Objectives	2
1.4 Research Questions	
1.5 Delimitations	
1.6 Assumptions	
1.7 Significance of the study	5
1.7.1 To the researcher	5
1.7.2 To the retail store	5
1.7.3 To the university	5
1.8 Summary	5
Chapter 2	θ
Literature Review	6
2.0 Introduction	6
2.1 Effects of physical stock loss on sales target.	6
2.1.1 Internal theft	6
2.1.2 External theft	8
2.1.3 Damaged goods	8
2.1.4 Wastage/Spoilage	10

2.2 Effects of process failure on service delivery	11
2.2.1 Time Theft	12
2.2.2 Point of sale inefficiency	12
2.2.3 In-Auditing Stock Count Errors	13
2.2.4 At the checkout errors	14
2.2.5 Misplaced Stock Keeping Units (SKUs)	15
2.3 Effects of value discrepancy on profitability	16
2.3.1Pricing discrepancy	16
2.3.2 Price marked downs	17
2.3.3 Refund fraud	18
2.3.4 Under-ringing of sales	19
2.3.5 Fraudulent voids	20
2.4 Effects of intercompany fraud on cost efficiency	21
2.4.1 Fictitious company	21
2.4.2 Collusion with employees	22
2.4.3 Short delivery	22
2.4.4 Overcharging	23
2.4.5 Retailer fraud	24
2.5 Summary	24
Chapter 3	25
Research methodology	25
3.0 Introduction	25
3.1 Research Design	25
3.1.2 Explanatory Design	25
3.1.3 Exploratory Design	25
3.1.4 Descriptive Design	25
3.2 Population and Sampling Issues	26
3.2.2 Sampling Technique	26
3.2.3 Sample frame	26
3.2.4 Sample Size	26
3.3 Data Collection Procedure	27
3.3.1 Secondary Data	27

3.3.2 Primary data	27
3.4 Research Instruments	28
3.4.1 Questionnaire	28
3.4.2 Interviews	28
3.5 Validity and Reliability	28
3.5.1 Validity	28
3.5.2 Reliability	29
3.6 Data Presentation and Analysis	29
3.7 Summary	29
Chapter 4	30
Data Presentation and Analyses	30
4.0 Introduction	30
4.1 Response rate from target population	30
4.2 Physical Stock Loss	30
4.3 Product Valuing Discrepancy	31
4.4 Operational failures	32
4.5 Intercompany Fraud	33
4.6 Analyses of Interviews	35
4.6.1 Inefficiencies at till point	35
4.6.2 How fraudulent voids	35
4.6.3 Vendor short delivery and Overcharging	35
4.6.4 Merchandise spoilages	36
4.6.5 Products under pricing error	36
4.6.6 Products undercharging	36
4.7 Summary	36
Chapter 5	37
Conclusions and Recommendations	37
5.1 Introduction	37
5.1.1 Physical stock loss	37
5.1.2 Products valuing discrepancy	37
5.1.3 Operational failures	37
5.1.4 Intercompany fraud.	38

5.2 Recommendations	38
5.2.1 Physical product loss	38
5.2.2 Product valuing discrepancy	39
5.2.3 Operational failures	39
5.2.4 Intercompany Fraud	39
5.3 Suggestions for Future Researches	39
APPENDIX 2; RESEARCH INTERVIEW GUIDE FOR MANAGEMENT	45
APPENDIX 3; RESEARCH QUESTIONNAIRE	46

# LIST OF TABLES

Table 1.1 Sources of Shrinkage and their contributions to Store loss	2
Table 1.2 Causes of shrinkages and their percentage contribution to store losses	3
Table 3.0 Population and Sample Size	27
Table 4.1 Response rate of target population	30

# LIST OF FIGURES

Figure 4.2; Effects of physical stock loss on sales targets	31
Figure 4.3: Effects of product valuing discrepancy on profit targets	32
Figure 4.4: Effects of process failures on service delivery	34
Figure 4.5: Effects of intercompany fraud on store's cost efficiency	35

## **DEFINITION OF TERMS**

# Shrinkage-

The difference between expected value to be realised from the stock and the actual value attained. It is also the difference between the inventory reflecting in the store system and the actual physical inventory in the store.

#### **Process errors**

Errors committed during the operations of a retail store.

## **Collusion**

Is an agreement between two or more persons to conspire against the retail store for their own personal benefits at the same time at the cost to the retail store.

## Fraud

Is a falsification of information and inventory in an attempt to reap off the company cash, inventory and information for personal gains.

# Chapter 1

#### **General Introduction**

#### 1.0 Introduction

This chapter focuses on the background to the study, statement to the problem, research objectives, delimitations, and significance of study.

### 1.1 Background to the Study.

Choppies Supermarket Mkoba Branch opened in December 2015. Over the past months it has recorded real growth in turnover and in profitability despite the economic challenges that prevailed in the nation. The branch, similar to other branches, has adversely been affected by the softening aggregate demand in the economy which led to a growing shrinkage within the branch.

Shrinkage is the difference between stock recorded value in the inventory management system at the store and actual inventory value in the store, as determined by a physical count of inventory. This difference is divided by store sales for the period and is expressed as a percentage of total sales (Gilbert, 2003).

Shrinkage has an impact on the performance of Choppies Supermarket Mkoba Branch, as lost inventory equals to lost revenue. As anytime a customer or employee walks out the door with an item, the stores lose out on the chance to generate revenue and cash from it. Similarly, shrinkage impacts on the retail's profits as it has to cover the costs of acquiring the goods and making no money on the investment. High shrinkage can make a difference between a slight profit and loss for the store (Kokemuller 2007).

Another impact of shrinkage is on shoppers' satisfaction. Choppies Supermarket Mkoba Branch is reliant on its customers' satisfaction to run a thriving business. In modern society shoppers' satisfaction is negatively affected by shrinkage. Shrinkage can cause merchandise to be unavailable in store through stock outs, and by making merchandise that is viewed as high-risk to theft to be inaccessible to the patrons as it will be in lockers (Chapman et al 2003).

The Choppies Zimbabwe before the opening of the Mkoba branch had a policy of counting stock after every three months that is on quarterly basis. Due to the high shrinkage levels it has changed its stock count policy to after every two months that is six times a year.

Table 1.1 Sources of Shrinkage and their contributions to Store loss.

Shrinkage	Accepted	Acceptable	January	March	May 2016	July 2016
Source	shrinkage/	shrinkage/	2016	2016 stock	stock take	stock take
	year stock	stock take	stock	take	variance \$	variance \$
	take \$	count \$	take	variance \$		
			variance			
			\$			
Bakery	12 000	2 000	3 200	2 789	3 412	3 254
Warehouse	45 000	7 500	10 255	6 458	7 204	5 256
and shop						
floor						
Liquor	12 000	2 000	3 500	500	3 785	4 582
Tills	13 000	2 166	3 259	1 000	3 325	3 254
Fruit and	18 000	3 000	4 245	3 100	2 678	3 578
vegetables						
Total \$	100 000	16 666	24 459	13 847	20 404	19 924

From these sources of shrinkage Choppies Supermarket Mkoba Branch is faced with reduced profits as shrinkage takes a bite out of a store's bottom line. Beck, (2009) said shrinkage devours about 4.7 percent of supermarket sales. As Choppies Supermarket Mkoba Branch typically must operate with razor-thin profit margins to remain competitive, so these sources of shrinkage cuts into profits and are likely to have a significant negative effect on the store's performance.

The fruit and vegetable section is contributing to shrinkage through spoilages. Most vegetables and fruits are spoiling due to frequent refrigeration failure and high prices than offered by hawks just outside the store making the demand highly fluctuant.

Till operators are the most notorious contributors to shrinkage as they makes many errors when processing a transaction. Some till operators even steal the money from the till and give it to their relatives during the operating hours. The liquor section and shop floor has also seen their share of shrinkage through breakages, short deliveries, shoplifting and theft by employees as they covertly drink and eat merchandise in the backrooms.

Choppies Supermarket Zimbabwe has tried to reduce the impact of shrinkage by penalising the responsible management and supervisors for shrinkages above the acceptable levels. This strategy yielded less result as it is still faced by devastating levels of shrinkages.

Table 1.2 Causes of shrinkages and their percentage contribution to store losses.

Cause of shrinkage	Value lost \$	Total shrinkage	Percentage to store
		suffered \$	shrinkage (%)
Physical product loss	59 697	84 730	70.4
Value discrepancy	10 838	84 730	12.8
Supplier fraud	12 356	84 730	14.6
Process errors	321	84 730	2.2

Physical stock loss is the biggest contributor to shrinkage Choppies Mkoba Branch, with 57 percent of shrinkage resulting from employee and customer theft. To combat shrinkage from theft, process errors, supplier fraud and value discrepancy. The store incurs more expenses of setting up security equipment, such as intruder detection devices and CCTV, placing up and managing a control room, hiring security staff, and changing routine checks which eats on remaining profits (Chapman, et al, 2003).

Joseph (2007) advanced the store's process errors and damaged merchandise will fail on customer satisfaction. This is as customers will sometimes not find some products they need to buy and also charged high prices by the store to cover lost sales through shrinkage. For stores selling relatively price-sensitive merchandise, higher prices will proficiently place them at a competitive disadvantage. The store can also have to lower wages and halt wage increases, making it more complicated to attract and retain high-quality personnel.

In the table above, operational failures added to the adverse impact of shrinkage through stock outs and inaccurate product valuing losses. These losses negatively effect on Choppies Supermarket Mkoba Branch in two crucial ways; chiefly loss in profitability and prolonged spending to cover these loses. Losses in profitability were noticed in light of stock outs and under pricings negative effects upon stock sales. This handicaps the retailer's attempt to meet fixed financial obligations. In other words shrinkage has an effect on targeted corporate results of a retail corporate operation (Chapman et al 2003).

#### 1.2 Statement to the Problem

Choppies Supermarket Mkoba branch is being impeded by shrinkage in meeting its set performance targets. This has prompted the researcher to want to institute the effect of shrinkage on store's performance.

## 1.3 Research Objectives

- To determine the effects of physical stock loss on sales.
- ➤ To determine the effects of process failure on service delivery
- To establish the effects of value discrepancy on profitability
- > To determine the effects of intercompany fraud on cost efficiency

#### 1.4 Research Questions

- ➤ What are the effects of physical stock loss on sales?
- ➤ What are the effects of process failure on service delivery?
- ➤ What are the effects of value discrepancy on profitability?
- What are the effects of intercompany fraud on cost efficiency?

#### 1.5 Delimitations

The research was based on data obtained from Choppies Supermarket Mkoba Branch. The data used is attained from the management, supervisors and store personnel of the study company. The effect of shrinkage on store's performance shall be the main focus. Due to short period of study, the research shall be based on interviews, and questionnaires.

#### 1.6 Assumptions

- > Data collected is unbiased and correct.
- The respondents shall answer and submit back the questionnaires.
- The secondary data will be accessibly and reliable.

# 1.7 Significance of the study

#### 1.7.1 Researcher

The capability of the researcher will be improved in the area of study. The research is also a partial fulfilment of the requirements of the Bachelor of Commerce Retail and Logistics Management Honours Degree.

#### 1.7.2 Retail store

The research will provide a base for in-depth understanding of how shrinkage affects the company performance.

## 1.7.3 University

The university library will be enriched with the new look on shrinkage. The students will have an in depth knowledge of how shrinkage impede company performance.

# 1.8 Summary

This chapter looked at the background to the study, statement to the problem, research objectives and questions, delimitations to the study and significance of the study. The next chapter will look at the literature review.

# Chapter 2

# **Literature Review**

#### 2.0 Introduction

This chapter focuses of the effects of physical stock loss on sales target, effects of process failure on service delivery, effects of value discrepancy on profitability targets and effects of intercompany fraud on cost efficiency.

### 2.1 Effects of physical stock loss on sales target.

Beck, (2008) stated physical stock loss encompasses all hindrances that impedes the achievement of targeted sale revenue levels due to some of the physical stock procured to meet such targets would made unavailable for sale when needed by the store. It refers to actual loss of goods within the business via i) internal theft, ii) external theft, iii) damaged goods, and iv) wastage/spoilage.

#### 2.1.1 Internal theft

Dunne et al, (2012) stated internal theft is the loss of goods carried out by people directly employed within the organisation. Theft of stock by employees includes direct theft from stock rooms and shop floors, collusion with customers and suppliers or defrauding the retailer. As retail stores operate at 15 per cent profit margins, US\$2 sales revenue are generated from a US\$2 product sold, the store realises 30 cents profit and US\$1.70 goes to operating expenses. However, this also means every \$2 product stolen; retailers must sell 7 such products to generate \$2 value which was stolen. This leaves the retailers with less sales revenues than targeted as the future sales revenues are used to cover the products' value stolen.

Chapman and Templar, (2006) added, internal theft is unauthorised taking of goods and cash from a store at any time of the day or night by staff employed by the company including contract staff, for instance third party security staff or maintenance workers. Retailers have estimated that internal theft accounts to 40 per cent or more of all lost sales. This is as products procured for resale will not generate the expected sales target as they would have been stolen and no longer generate any sale revenues as expected. Employee theft accounts for between 10-15 per cent of the cost of consumer goods. It plays a major part in the bankruptcies of between 30 and 50 per

cent of all companies going into insolvency as purchased merchandise will end up not generating the expected sales needed for survival of the stores (Hollinger and Adams, 2008).

Barfield, (2006) advanced theft by employees is a major concern for retail businesses. Employee or staff theft means the dishonest taking of property belonging to the employer. Offences committed by staff thieves that have fall into cash categories ranging from bank takings to bill manipulation. These types of theft reap off money right from company's sales revenues as sales generated from other products will be used to cover up and absorb the stolen value. This impedes the retailers from achieving their desired sales targets as some revenues will be used to conceal the stolen money and resources. This in long run leaves less money devoted on improving the retail store and also contributing to employees' welfare. This means there is no money to compensate higher wages and benefits, so quality and experienced salespersons have good reasons to take better compensating jobs elsewhere. This will make it difficult in future to achieve desired sales targets as knowledgeable and experienced sales personals and other employees who can attract and enforce a sale would be gone.

Hayes, (2007) argues internal theft as the second biggest cause of loss of sales margin, in the retail environment. As internal theft, involving company employees, causes the most damage to retailers on an annual retail sales losses basis. It is responsible for the greatest financial loss and a substantial impact on the business survivability. As employees have greater access to more systems, more products, and more areas of the store than customers. Internal theft can affect a business much more quickly. Persistence of employee theft in the absence of effective measures to deter them can lead to other instances of crime in the workplace such as workplace violence, harassment and shoplifting by customers (Food Marketing Institute, 2013).

McGoey, (2015) argued that contributions of employee theft to retail loss is subject to critical identification complications, as small proportions of theft by staff are rarely detected at times it occurs. This means, staff crime is based on insights of security and loss-prevention officers. As accurate analysis of actual losses suffered is impossible to attain. The level of harm inflicted by internal theft is the bases of insolvencies of mostly one-third of retail business in the United States of America. In a bid to recover from these losses caused by internal theft, retailer may have to forgo salary increases, or reduce payroll costs by retrenching employees, postpone employee promotions and place business growth plans at halt. This is as store sales revenues will

be flat or falling behind as compared to desired whilst operating costs and costs of goods sold increasing which results in either net losses or fewer profits to sustain the business.

#### 2.1.2 External theft

Bailey, (2006), stated external theft is often an act of theft from a retailer committed during hours the store is open to the public by a person who is or appears to be a legitimate customer with the motive of acquisition of goods at minimum or no cost. Such theft leaves fewer products for legitimate customers to purchase from resulting in low sales volumes and margins. This is as legitimate customers will not find some products they want. Also, with fewer inventories, the retailer will be left with a small pool of variety for customers to choose from leading to lost sales from customers who want one stop shop service.

Holweg.et al, (2016) added, external theft consists of known incidents of theft by members of the public and has been recorded by the company. Shoplifting usually is accounted for, from recovered products mostly unsuitable for resale as they will be recovered in customers' toilets and around customers' bodies during body search. Stores suffer extra costs to combat shoplifting as they have to install expensive security equipment, such as intruder detection devices and CCTV, setting up and managing a control room, employing extra security personnel, changing standard checks to catch up with shoplifters (Chapman, et al, 2003).

National Retail Federation, (2015), argued external theft in form of organised retail crime or by professional groups for resale, has an increased impact on retailers than general members of the public. Organised retail crime such as pirates and robbers usually targets cargo in transit. This has a higher average dollar loss in annual sales revenues as procured and paid for products do not make it to the point of sale of the retailer. This means retailers will procure and pay for goods which will not generate any sales revenues for them. This forces the retailers to cover such losses with the sales revenues from other products which hinder the achievement of the desired sales targets for that period.

#### 2.1.3 Damaged goods

Beck, and Peacock, (2009) said damaged goods are goods that have been damaged during the process of delivery, storage, and merchandising. This means the expected sales revenues from them can no longer be generated as are worthless and heading for disposal. Such goods include pallets of sugar that are left outside in bad weather or cartons of washing powder crushed by a

forklift truck. Their disposal is also a cost which is financed by sales revenues which means fewer revenues will be met than targeted.

Chapman and Robson, (2016) advanced throughout the work day or week, products are spilled, ceiled packages broken or crushed, resulting in lots of damaged inventory. Such inventory can only be disposed of as damaged products cannot be sold under healthy and safety laws. This only adds to total sales loss on year-end as store loses a chance to generate sales revenues from that stock. Either way, damaged inventory was purchased for resale or, at the least, recoup the inventory associated costs. This negatively impact sales volume as less products will be sold, which undermines generation of desired sales revenues. As fewer inventories are left for resale after damages, retail stores have reduced products pool to recoup operating costs and pay vendors. This reduces overall sales revenue in future as unpaid vendors will not supply constantly the retailer.

Beck (2009) argued for damaged goods retailers needs to refer to the date and time of the damage. This information can be particularly useful on determining the damage caused to the cash flow. This is as cash spent on costs of acquiring, handling and storage of inventory for resale is never realised and even more cash will be used to pay for disposal costs. Not knowing in which quarter the inventory was lost is also detrimental, as this will affect taxable income for that quarter as the company will pay more income tax than it should be.

Grasso, (2013) added, costs of damaged inventory are not the full extent of retailers' sales loss. To determine the full amount, must use the original cost value to initiate calculations. If original invoice that goes with the items can be found, this is known as the historical cost. If cannot be found, must use an average cost for all similar items that have been purchased to find the true value of the loss incurred. To figure how much could have sold the inventory for, if not had been damaged. Then subtract the original cost, advertising expenses and any other costs for handling, such as shipping and storage. The result is the net realizable value. That is what the inventory was worth, which is the true sale revenues unrealisable.

# 2.1.4 Wastage/Spoilage

Qing Li, et al, (2016) stated product spoilages are products that have reached their expiration date or gone beyond agreed temperature parameters. These products are no longer safe to sell to consumers which mean stores will lose sales revenues from such products. This inevitably impedes attaining of retailers' desired targeted sales volume and revenues. Perishable products' greater the risks associated with a product, the more frequently consumers will check expiration dates. Such expiring products represent a key challenge for store as sales volumes and revenues will be quickly deteriorating. The retailers regard selling such products off at a reduced consumer price as the most effective strategy at a store-level across most product categories although targeted sales figures will not be achieved.

Kouki, (2010) said, when buying perishable products, the probability of a loss through spoilage occurring is largely dependent on whether consumers feel that they can consume the entire product before its expiration date. Furthermore, as the likelihood of loss increases, the willingness to pay also decreases. These results in lost sales revenues and stock turn rates as retailers' increases prices to meet set profits target as only alternative to address spoilage losses than taking a financial hit themselves.

Wyman (2014) advanced up to one in seven truckloads of perishables delivered to retail stores will be thrown out. That's a huge sales loss even before factoring in the costs of getting the goods to the stores, handling, stacking, and then culling and paying for disposal. But those costs pale in comparison to the costs of losing customers who care about freshness. This results in loses in sales in other products too as customers will be already be disgruntled about the store. More than four-fifths of customers have seen bad produce on display in their grocery stores. Nearly three-fifths have found goods they bought at the supermarket unsatisfactory when they got home and nearly two-thirds have switched supermarkets as a result, with few going back to buy again.

Livingston (2014) argued fresh vegetables and meats are often cooked up for in-store deli and salad counters before they spoil in supermarkets. But a portion of it is inevitably thrown into the garbage and ends up in landfills, and some sold to salvage stores, but this does not generate the originally envisioned sales target revenues.

Clarke, (2010) added, freshness and lost sales together represent the most under-managed lever in the grocery business. For a US\$10BN-a-year retailer, such a make or break lever can liberate as much as US\$60MM annually pure additional profits. Retailers' shareholders were to know and see how retail product spoilage can make or break annual sales revenues in perishables. Retail executives would be far more likely to look at the problem anew.

## 2.2 Effects of process failure on service delivery

Beck and Peacock, (2009) process failure is sum of all the issues that go wrong as merchandises makes their way from delivery to the retailer to their ultimate exit at store's front door in the fingers of customers. This means, although merchandise will be available for sale. Some mishaps will happen to undermine the service quality offered and ruin customers' shopping experience. Gilbert, (2003) added opportunities for service delivery quality distortions through human errors are numerous. It is given by numbers of customers served and volumes of transactions processed at once by a single employee. In the hurry many things will go wrong and results in customers' dissatisfaction with service delivery quality.

Gilboa et al. (2008) advanced operational screw ups negatively have an effect on store performance. In a meta-analysis of seven unique types of work-related stressors, found that operational disasters had been most strongly correlated with poor job performance. This might be due to the fact operational screw ups erode employees productiveness through workarounds. Spear (2005), added having to continuously work around, operational failures burns out employees and contributes to inefficiencies which inconvenient customers who expect greater shopping experiences. Finally, operational screw ups prolong vital customer care and service delivery which results in errors that harms the customers.

Beck, (2007) said process failures, or operational failures are much more challenging and open to a wide range of interpretations. Perhaps the most inclusive process failures interpretation is the one which include; Losses due to flaw operating procedures within the organisation such as; i) time theft, ii) point of sale inefficiency, iii) in auditing errors, iv) at the checkout errors, v) misplaced stock keeping units.

#### 2.2.1 Time Theft

The American Payroll Association, (2014) stated beyond inventory and cash, productivity losses also includes time theft known as "buddy-punching" or payroll fraud. Most of employees in retail industry admit to time theft. Time theft is the act of a worker "clocking" in or out for another "buddy-punching" or an employee will clock in at the beginning of shift, sneak out and comeback to clock out at the end of shift. Time theft is a major contributor towards poor customer service delivery as fewer personnel left to care for customers will not be able to perform up to customers' expectations due to work overloads and rushing around to satisfy many impatient customers at once or in a small time frame. This leaves some customers not attended fully as they expected with result in dissatisfactions and loyalty issues.

Crossmatch, (2014) added time theft results in lost productivity and indicates the company is not serving customers at the highest level as missing staff impacts customer service quality, resulting in lost sales and decreased customer visits. Another adverse impact is that while the dishonest employee appreciates the additional time off, honest employees resent the dishonest behaviour which reduces the level of morale of the honest employees which leaves them demotivated. The extra costs in terms of salaries of up sent employees diminish store revenues. The short-term and medium term effects of up sent employees and demotivated employees are productivity drops as employees work short-handed until the company infuse new employees into the workforce. Productivity can continue to fluctuate as employees adjust to the company's operational methods and performance expectations with results in inconsistent service quality which frustrates customers.

#### 2.2.2 Point of sale inefficiency

Kuklin, (2013)stated point of sale inefficiency amounts to loss of customer satisfaction. Inefficiency at the point of sale terminal is decisive as it affects customer shopping behaviours, decisions and perceptions as they refer to their experiences at the store. Inefficient or inaccurate checkout process causes customer dissatisfaction as they have to wait for long time to be served. After the sale customers would not get expected service in time as inefficient employees would be disoriented. This is detrimental as service delivery quality depends on time taken queuing, promptness and caring of till operators and time undertaken processing a transaction.

Gilbert, (2006) added point of sale terminals are often set to time out after a short period of inactivity. A store associate returning to the point of sale terminal after helping a customer with a selection needs to log back on to the terminal which consumes times. This negatively destructs customers' perception on the retail brand's service delivery quality. Also too many errors and lax serving attitudes slow down transaction processing time, and results in longer waiting times for customers and charging errors usually of overcharging the customers.

## 2.2.3 In-Auditing Stock Count Errors

Ekwall, et al (2016) stated in-auditing errors, of stock being incorrectly counted in the audit process during annual stock checks and periodic cycle counts as inventories are scattered across multiple locations within a store has an adverse impact on-timely replenishment and order fill rate. This is some stocks will stock outs and not quickly replenished as employees thinks they are still there in another location of the storeroom. This hinders achieving customer service prowess as customers will not find what they travelled all the way from their homes kilometres away to buy. Also a purchase in hurry makes a purchase, he will be delayed as the products will be searched in a heap of other stacked products which gravely inconvenient that customer.

Harris and Rebekah, (2015) advanced in-auditing stock counting errors results in errors in the Balance Sheet. This is as wrong stock balance makes the owner's equity and asset values on the balance sheet incorrect. In-audit error of inaccurate stock count which overstates the total amount of merchandise actually in inventory at year-end will result in overstated Gross Profit and Net Profit for the current year which, in turn, can result in the paying of excess income taxes. This misstatement of Gross Profit and Net Profit will distort the company's financial statement for two years, the year in which the inaccurate physical inventory took place and the following year when the inaccurate physical inventory is corrected by the taking of a correct physical inventory. Many retailers base their store manager's and/or buyer's compensation, in part, on the achievement of certain gross profit, stock turn rate and shrinkage goals. When the physical inventory is incorrect this causes the amount of compensation to be computed incorrectly. While one buyer could be over-compensated, another could be unfairly penalized.

#### 2.2.4 At the checkout errors

Cole. (2012) stated errors occurring at the checkout leads to a discrepancy in the store system. Such errors as a checkout operator entering wrong code for a similar product or not scanning free products as part of a promotion and discounts, they will not reflect in the store system and the replenishment system will not order inventory from the vendor leading to costly stock outs which inconvenience the consumers of such products. This is as these systems rely on sales history which is combined with in-store inventory levels to determine optimal reorder points and automatically notify the vendor when additional inventory is needed. At which this time the stock will be reflected as still above reorder level and not near replenishment levels.

Gilbert, (2006) advanced when checkpoint operator enter the wrong code, point-of-sale (POS) and store systems will record a sale of the wrong items. These systems normally operate on a stand-alone basis and then communicate information to the back office systems on a periodic basis as their main function is storing master data used to calculate prices and discounts and physically manage merchandise moving into or out of the store. The replenishment systems after inquiring with the point of sale and store system will automatically replenish wrong merchandise items. This results in overstocking costs of slow moving merchandise and greater stock out costs of fast moving merchandise as the stores' convenience rating will degrade among customers as it cannot deliver their popular products constantly.

Fleisch and Tellkamp, (2014) added retail outlets have capitalized, and continue to devote, vast amounts of cash in inventory statistics technology so as to improve in their accurate product delivery. They use these statistics applied technologies often to track merchandise and operations, automate transactions, and service delivery decisions in the supply chain. Inaccurate stock data in stores are extensive and expensive. They pose an inevitable problem of poor products variety and category due to harp hazard and incorrect replenishments and products drop out causes by incorrect information in the system resulting from checkout errors.

Zane, (2013) argued that stock documents errors contrary to popular belief, most outlets cannot, with any level of precision; identify the quantity of inventories of a given product available at a store. At prominent outlets more than 65% of the inventory records are inaccurate at store- Stock Keeping Units level that is, "system" stock did match "physical" inventory. This usually results

in stock outs and drop outs of famous products which in turn disrupt the shopping experience of clients as they cannot find what they for. These issues reduce profits by more than 10% and make the investments in these technologies money well wasted as service delivery levels keep on dropping.

# 2.2.5 Misplaced Stock Keeping Units (SKUs)

Sutherland, (2013) said misplaced Stock Keeping Units can substantially decrease customer satisfaction as they cannot find products on their actual shelves. This makes the shopping experience boring as customers have to hunt for products they want as they can found at the next shelf if lucky enough. This reduces profits as sales are lost when customers go without buying some products or abandon the shopping and goes to shop somewhere else. The profits lost due to misplaced SKUs reduce profits by 25% impeding the retailer's ability to offer greater customer service as it has to employee fewer personnel to cut on costs. Misplaced SKUs has a long-term also an adverse impact such firm's brand image problems in future.

Bremen. (2016) advanced merchandisers are frequently charged with shifting merchandise from the storage areas to the sales floor based on turnover of specific products. The task, although it seems to be simple, is rendered difficult by means of a variety of factors. One, store merchandiser, who regularly are very busy for the duration of high-traffic periods, and find it hard to top up some merchandise directly from the storage areas due to many different products wanting to be replenished at the same time and from different sections of the store, two, most shops no longer organize the stock in their storage areas very well. Consequently, merchandisers might also not know if merchandise that has stocked out in the shop floor area is even available in the storage areas. All this makes the store shelves go empty and idle which shows the unproductive of the store.

Ekblom, (2014) argued some shops have tried, and many others have considered, permitting clients to view a store's inventory on the web and verify whether product is available at the store and even to reserve the product for future purchase without visiting the store. The negative impact it has as a client verifies on the internet that the product available at a precise shop and travel to that shop solely to discover out the product is accessible as it is misplaced somewhere in the store. The price associated with disappointed clients after promising product availability is substantial to retailers' loyalty and pride

# 2.3 Effects of value discrepancy on profitability targets

Beck and Peacock, (2016) stated products value discrepancy category considers changes to the price of goods. This means the originally envisioned selling value and revenue to volume ratio is no longer realisable. These results in profitability targets not achieved as sales revenues generated are lower than targeted. The original selling price is reduced in order for the products to sale faster than the current rate. Value discrepancy takes form of; i) pricing discrepancy, ii) price marked downs, iii) fraudulent voids, iv) under-ringing of sales, and v) refund fraud.

# 2.3.1Pricing discrepancy

Clodfelter, (2014) stated pricing discrepancy errors are losses caused by errors in which goods are priced and sold in the business. Pricing errors such as goods being incorrectly coded in the store inventory system or staff incorrectly pricing lower than set price of a product in the back room areas or on the shelf undercuts profitability as the retailer will be selling the products at a lower selling price which was set to meet the envisioned profit targets. This is as every profit target has its own products price level which can cover all costs and meet it. Pricing lower than that stipulated price, results in fewer profits as sales revenues will not cover enough the costs so as to distribute targeted profits.

Bartholomew, (2012) added price discrepancy of valuing lower than the set value affects the volume of sales up or down. As retail stores can value essential items lower to acquire the attention of patrons whom they will offer other costly commodities. Some clients have an uneasiness of the product quality is poor if the prices are too low. Clients searching for quality more often have desire to pay the value which the product is worth. Setting a low price can send a wrong message to clients that the products are not in the same class with products available in other stores. While low prices may not earn more noticeable sales volumes, to a greater extent the more the products are sold the more profit is lost. Even the sales revenues will be fewer to easily cover all costs incurred leaving little revenue to distribute as profits.

In a study by Welch and Massey, (2013) found that pricing discrepancy of overcharges were more frequent than undercharges. In fact, they found that overcharges occurred twice as often as undercharges and cost consumers three times more than they were saving on undercharges. This inconsistence has a risk of upsetting customers as disappointed consumers boycotted retail stores that overcharge them and frequently went public with their disappointment. This causes loyalty

and patronage problems for the stores resulting in fewer sales volumes and value. These translate to fewer profits than targeted as little revenues are consumed by operating expenses.

Gilkey, (2012) argued pricing discrepancy of low prices have an effect on how the product is perceived, affecting sales volume which in turn affects the store's profitability. Products priced lower than stipulated price realise fewer sales revenues regardless of a slight sales volume increase. This leaves low revenues to absorb an increasing operating cost as more sales volume equals more operating costs. This in-turn results in fewer profits than initially targeted. On the other hand, customers have price anchors in their minds within every established industry; of what constitutes fair prices for given products. Price above the anchor, there's need to justify the cost of the products to keep customers interested or experience low sales volumes and lower profit margins or net loses. Bump prices, the products would scare away consumer with an idea that it may longer be of the right quality than same products offered by other outlets meaning few or no sales to that products resulting in loses or fewer profits than expected.

#### 2.3.2 Price marked downs

Clodfelter, (2004) stated price mark downs are when original prices of products are reduced to push sales of the products. The effect is of increased sales rate but due to competition, not enough volumes would be sold cover expenses and meets the targeted profit margins. However, worst things about using markdowns to generate sales volumes are it opens a trap in long-term use. As the retailers brings in merchandise of high initial mark-up with plans of offering big markdowns as initial mark-up covers most costs. Loyal customers start to see as days go by prices start to drop gradually. They begin to wonder just how much the merchandise is really worth and some customers begins to frequent the other stores driven in search of value and honest. This leaves the store with few patrons and loyalty issues in future hence experience fewer sales than expected and inevitably net loss or fewer profits than targeted (Bartholomew, 2012).

Neslin et al. (2009) advanced on the dynamics in standard sales, as stockpiling is the acceleration of a purchase in response to a price cut. If consumers accelerate purchases, their inventories increase. This can decrease sales value and volume in subsequent weeks and months. However, the effect may be difficult to observe in store data but subsequently targeted profits are unrealised as fewer and fewer sales value and volumes are realised from customers' purchases. Robert et al, (2010) added increases in mark downs reduce standard sales resulting in reduced

profitability attained by retail store. Discounts can hurt brand equity, and reducing regular price purchases as clients will be waiting for the discounts to start purchasing. Similarly, increased discounting may reduce customer repeat purchase rates implying a decrease in off-deal purchases resulting in increased operating costs and fewer profits in off deal seasons.

Mela et al. (2012) added consumers may learn to lie in wait for a deal, that is decreasing standard sales and yearly profits. Finally, it is possible that an increase in discounts lowers reference prices. This would make regular prices appear less enticing by contrast meaning the retail store will be out of business during regular pricing periods. This means sales would presumably be lower in such periods and operating costs high resulting in undercutting of stores' profits.

Faruk, (2015) argued price mark downs stimulate price consciousness which is "the degree to which the consumer focuses exclusively on paying low prices". For price conscious consumers, low price is more important in purchasing the chosen product. When consumers think of price as the resource they tend to be price conscious and will shop at more than one store to get the lowest price. Purchasing promoted products provide savings for price conscious consumers. The more prices conscious the consumer is, the higher the probability to be prone to in store discounts, hence boosting store profitability from massive discounts.

In addition, Martínez and Montaner (2006) found that price conscious consumers attach less importance to the product quality, they enjoy planning and shopping, when they do their shopping they usually buy impulsively, they enjoy brand switching frequently and they feel attracted by new products. In addition, they consider they have enough storage space for their extra purchase and use store flyers to decide the specific product to purchase and the stores to buy from which enhances the achievement of profitability targets for stores offering discounted products.

#### 2.3.3 Refund fraud

Jin and Sternquist (2004) stated refund fraud can be used as a method of low-risk stealing by employees, and criminal gangs. The advantage of refund fraud is; stolen merchandise usually sells at discount, usually 25% and 45% of retail price. Products refunded will retain full retail price, making crime profitable and on the other hand retailers not achieve their set profit targets.

The Global Retail Theft Barometer, (2008) added refund fraud is detrimental to sales, inventory management and profit margin targets. For instance, the cost of time and resources spent on processing a fraudulent return, restocking returned merchandise, revaluating its worth, or determining where, how, or even if it can be resold. All this bears great costs in hiring equipment and personnel dedicated to such tasks, and their operations costs are covered by the remaining profits. This reduces the remaining few profits from meeting the targeted profit levels as they are spent in covering the costs brought by the fraud. Returned merchandise unfit for resale is doubly impactful, as the store loses both profits from the original sale used in refund, as well as profits spent on processing and disposing off the products.

Scott and Quelch, (2014) argued refund fraud also involves activities; from check fraud to return of stolen goods. Check fraud involves purchase of goods with a bad check. This means no profit is generated from the sale and inevitably the store will fail to meet its targeted profit levels. The fraudster then returns the product before the check clears from the bank. This means the fraudster will be given hard cash and the retailer will be left with a bad check implying reduced profits emanating from cancellation of other legitimate sales to refund a fraudulent return. This increased costs of the sold and operating costs by serving the fraudster. Another return fraud is price manipulation takes form of price tag or container switching, price alteration, or the practice of replacing one item for another before making a return. The offender might purchase two similar items with different prices, switch the packaging, and return the cheaper item and retain higher retail price value from a cheaper product that is reducing the profits to be attain in future by retail store as another legitimate customer will return it complaining incorrect contents.

# 2.3.4 Under-ringing of sales

National Retail Federation (2014) stated under-ringing of sales occurs when the cashier rings an item at less than set price, collects the full amount, and steals the extra money. This means the retailer will receive a part of the sales value which in turn might be below the cost of the good sold resulting in destructive Net Loss in the bottom line.

Clodfelter, (2004) adds under-ringing of sales and tearing up order tickets is a trick in the restaurant and beverage industry. An employee serves a customer, and the customer pays for the meal later. The employees instead of ringing the order and place the money and ticket in the register, the employees' tears up the ticket and pocket the cash. The restaurant or deli department

will have no record of the order or money tendered. This consume the profits of the company as other sales will be used to cover the costs of that stolen sale which reduces the revenues to be distributed as profits at the end of trading period.

Aradhna, (2013) added under ringing of sale also take form of an employee sale something for US\$17.50," and rang in US\$7.50, and the employee put the US\$17.50 in the register and at the end of the night, would pocket the extra US\$10.00. Since the cash in the register drawer would match the transactions listed on the register tape, the theft would not be known but the store will never realise its US\$10.00 profits and this undermines it from meeting the targeted profits by US\$10.00 or more if the fraud goes for long time undetected.

#### 2.3.5 Fraudulent voids

According to Clodfelter, (2004), voids are similar to refunds in that they cancel a sale and undermine the true profits generated. To process a fraudulent void, the cashier keeps the customer's sales receipt. The cashier is now able to ring the item up as a voided sale and takes out the cash from the register, making it appear as if the money has been returned to the customer rather than stolen. A void slip that requires a manager's signature for verification is attached to a copy of the customer's receipt resulting in undermining the true retailers' profits at that period.

Mura, (2015) added fraudulent voids generally target cash sales. The aim of the fraud is to stop the sale from being recorded and to steal the proceeds. If the sale is not recorded, the money will not be missed from the banking of sales receipts. Void sale requires a real sale of goods with a real customer, as someone needs to hand over the money that is stolen. The employee will sell an item to a customer, hand the item to the customer and take the money from the customer, but will neither ring up a sale nor ring up a void sale. That means that a normal receipt for the money received cannot be given to the customer as, according to the business, the sale did not take place and profits not generated for that trading period.

Association of Certified Fraud Examiners, (2012) argued false voids has an alternative that removes the need to hide the reductions in stock after voids is to process a real sale in the records, but at a discounted price. The real price is collected from the customer, the discounted price is recorded and the balance is stolen. This will not show an inventory shortage and will

quietly share the profits of the store with the corrupt employee which reduces the total profits achieved during the trading period.

# 2.4 Effects of intercompany fraud on cost efficiency

Balmer, (2012) stated that, intercompany fraud is a deliberate theft or stock loss linked with suppliers, involving an inaccurate delivery and return of inventories. This has an implication of increased operating costs and the cost of goods sold which in turn mutilate store's performance. Supplying firms may resort to fraudulent deals and kick-back schemes with store's employees to ensure business relationship is maintained at the cost of the retail store. These types of activities can hurt the store's bottom line and financial stability. Intercompany fraud takes form of fictitious company, collusion, short delivery, overcharging and asking for favours.

#### 2.4.1 Fictitious company

Hubbard, (2006) said there are a number of schemes that an employee can engage in to steal money from an employer. One way is to set up a fictitious company. Then the scheme takes the following forms, that being a vendor who does not exist. It is given a real name, a real location, or a made up location. It is then given some authenticity, and the retailer authorizes payment to that vendor. That payment made by the retailer is a loss incurred as it has to be absorbed by the revenues raised by the retailer. The employee meanwhile, is on the other end receiving the check because they've created a vendor. The check comes in and it is deposited.

Bush, (2013) added, vendor fraud involves schemes in which the fraudster manipulates a company's accounts payable and payment systems for illegal personal gain. The vendor fraud will defraud the retailer through; billing schemes, and checks tampering schemes. Billing schemes; involves an employee using false documentation to manipulate a company's billing system to generate a false payment for his or her own benefit, or the fraudster manipulates the account of a legitimate vendor, causing double payment of a legitimate invoice. The fraudster either diverts the payment to an account under his control, or when the duplicate payment returns to the company, the fraudster intercept it and deposit it into their own bank account that is to make the company pay twice for one delivery that is reducing its profits earned. The retailer will not only suffer a double payment for a single delivery, but the prolonged fraudulent activity will lower the returns to investments ratio or even disseminate the retailers' investments.

# 2.4.2 Collusion with employees

Beck, (2008) described another more common scenario involving a real vendor. That real vendor engages in a collusion effort with the employee, either by perhaps offering the employee a bribe to engage the vendor's sale, in which perhaps the employee authorizes overpayments to the vendor or payments to the vendor for work or goods that has not been delivered. In this scenario, the retailer will suffer from purchases of either poor quality products or too many products which will take long and with great price reductions to sale. These types of deals usually impair the retailers' cost efficiency as it will heavily invest in promotions and massive discounts to push the products. This increases costs in two ways. One, the store will be buying expensive merchandise without any economies of scale benefited. Two, the merchandise will take long time before it is purchased due to either exorbitant price or poor quality leading the store to suffer high storage cost due to low stock turn over.

Kennish, (2011) added vendor fraud also takes form of corrupt influence which can include: employees paying too much money to a vendor or buying too many of products which results in high stock holding costs, breakages and disposal costs and expirations and costs associated with lost sales. Another vendor fraud involves employees bribed to qualify untested or unqualified vendors resulting to supplies of substandard merchandises which will in turn increases the costs of trying to push sales of poor quality merchandise. Improper contract awards, of intentionally accepting merchandise and services priced above the agreed prices, exclusion of other qualified vendors for the fraudulent supplier leads to poor assortment and delivery delays costs such as stock out costs.

#### 2.4.3 Short delivery

Grasso, (2013) stated supplier fraud is a predominant source of stock losses and stock outs, it happens when vendors short supplies or steal merchandise supplies during the course of delivering and stocking the company's shelves. Whether this shortage is unintended or intentional, the effect is devastating as the company will pay for goods that have not been received which increase its costs of doing business. Vendor fraud is one of the easiest methods of stealing from a retailer without being detected as they become apparently "trusted" suppliers with willingness to replenish gondolas as a courtesy. Truth is that when the supplier stocks the shelves, it becomes hard to distinguish between the current inventory at hand and that which has supposedly merely been delivered. The retailers will suffer a silent damaging increase in costs of

acquiring merchandise and hiring extra security personnel to safeguard the inventories from theft. This undermines the stores' efforts to minimise costs by making the store pay more money to the vendor than it should as it assumes has received more goods than it actually received. This undercuts the stores' profitability.

Kohne and Pekeur, (2014) argued, vendor fraud also takes form of delivery reloads which is delivery person removes merchandise from recipient once delivery is completed. Delivery person waits for the inventory to be counted and then removes the merchandise from the store or swap the inventory directly from the stockroom and replaces it with bad or expired merchandise. The retailers will suffer an increase in cost of goods acquired, as the retailer will pay more money for fewer goods, which means the cost of goods procured has increases than budgets for. The swapping with expiring or poor quality products results in retailers incurring cost of writing off the expired or poor quality inventories. Supplier fraud is main cause of increased cost of doing business for retail store as the suppliers or their agents intentionally supply fewer products than agreed and retailers are at the end charged for (Gilbert, 2003).

#### 2.4.4 Overcharging

Meth, (2014) advanced, common vendor fraud schemes include: Overbilling were vendors submit inflated invoices for their goods and services than agreed which makes the store to incur extra costs of acquiring the supplied goods and this usually blows the retailers' budgets. That is, the invoice might reflect charges for a greater number of goods than the retailer actually received which results in stock outs costs such as idle shelves costs. The vendor and employees might steer a retailer's procurement of goods to vendors offering higher prices that is defeating the store's chance to favourable prices and lower costs of acquiring, handling and selling the products. This is as those vendors do not offer sales support such as merchandising and promotions.

Beck, (2009) argued that over charging can take form of supplier stealing hard cash from the store by directly taking cash from the store. This happens when a charge for the delivery is accomplished on-site rather than billed later. The delivery person may additionally alter a consignment by means of adding additional inventory or altering the final rate ensuing in an overpayment that he pockets. This type of theft results in silent costs increases in form of unaccounted for cash disappearances and illegitimate increase in procurement costs.

#### 2.4.5 Retailer fraud

Guthrie, (2006) argued intercompany fraud does not only take form of vendors defrauding retailers. Retailers can defraud vendors by returning less merchandise than agreed and claim full value from vendors or lie to vendors that they supplied damaged fewer or expired goods and pay less money than they should pay in an attempt to cover up their own shrinkage by transferring the costs to the vendors.

Leaver, (2007) supported, retailers can defraud vendors by not paying for goods they have received in a bid to cut on its costs due to shrinkage. This takes form of a planned harp hazard buying and payment frequency; not signing some delivery invoices and many half down payments which will enables the retailer to skip other payments by the end of trading season.

Beck, (2008) advanced, retailers defrauds vendors by claiming huge discounts, charging them shelf space and many other charges so that they retailer will stock and sale the vendors' merchandise. This happens to small vendors when they want to introduce a new product into the market, and the retailers take advantage of that, and charge them fees and demand huge discount to put the merchandise on the shelf. All this is in a bid to cover up shrinkage costs incurred.

#### 2.5 Summary

The chapter reviewed the literature regarding to the topic in study. Different authors' views enabled a discussion on the study issue. The following chapter focuses on the methodology of the research study.

#### Chapter 3

#### Research methodology

#### 3.0 Introduction

This chapter gives information on research design, population, and sample frame, sampling techniques, data collection procedures, and research instruments.

#### 3.1 Research Design

Trochim, (2006) state research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data. There are many research designs that can be used in the study including exploratory design, explanatory design and descriptive design.

#### 3.1.2 Explanatory Design

Explanatory research is an attempt to connect ideas to understand cause and effect, meaning researchers want to explain what is going on. Explanatory research looks at how things come together and interact (Kowalczyk, 2013)

#### 3.1.3 Exploratory Design

Exploratory research is an initial research into a hypothetical or theoretical idea. This is where a researcher has an idea or has observed something and seeks to understand more about it. An exploratory research project is an attempt to lay the groundwork that will lead to future studies, or to determine if what is being observed might be explained by a currently existing theory. Most often, exploratory research lays the initial groundwork for future research (Kowalczyk, 2013).

#### 3.1.4 Descriptive Design

Descriptive research is an attempt to explore and explain while providing additional information about a topic. This is where research is trying to describe what is happening in more detail, filling in the missing parts and expanding our understanding. This is also where as much information is collected as possible instead of making guesses or elaborate models to predict the future - the 'what' and 'how,' rather than the 'why' (Leedy et al, 1997).

The researcher used a combination of explanatory research design and descriptive research design in this study. Use of these research designs will enable an in-depth investigation and explanation of how shrinkage is affecting the performance of the company in study.

#### 3.2 Population and Sampling Issues

Population is generally a large collection of individuals or objects that is the main focus of a scientific query; a research population is also known as a well-defined collection of individuals or objects known to have similar characteristics (Castillo, 2009). The researcher has a population of 34 individuals made up of Choppies Supermarket Mkoba Branch's management, supervisors and store personnel. Sampling is a process used in statistical analysis in which a predetermined number of observations are taken from a larger population. A sample is a subset of the entire population (ABE, 2006).

#### 3.2.2 Sampling Technique

The researcher used a probability sampling technique, as every individual in the population will have an equal chance of being selected as a subject for the research. This method guarantees that the selection process is completely randomized and without bias.

#### 3.2.3 Sample frame

A sample frame is a list of all eligible sampling units. Sample frame includes all individuals in the target population and excludes all individuals not in the target population (Shiu et al, 2009). The researcher has a target population of management, supervisors and store personnel from Choppies Supermarket Mkoba Branch as eligible individuals.

#### 3.2.4 Sample Size

Sample size is the number of recipient to be included in a sample. The sample size is an important feature for any research study in which the goal is to make inferences about a population from a sample. Statisticians have proved that a sample size of 30 or more recipients usually results in a sample distribution mean close to a normal distribution (Sunders et al, 2008). The researcher used a total of 4 interviews and 34 questionnaires to gather information from a sample of 34 individuals.

**Table 3.0 Population and Sample Size** 

Choppies Supermarket Mkoba Branch	Population	Sample Size	%	Interviews	Questionnaires
Management	4	4	100	4	4
Supervisors	8	8	100		8
Store Personnel	24	22	100		22
Total	34	34	100	4	34

#### 3.3 Data Collection Procedure

The researcher booked appointments for interview dates. Interview guide copies were given to management of Choppies Supermarket Mkoba Branch. The researcher then delivered the copies in person upon booking of appointments to ensure the guides reached the intended respondents. The researcher then distributed a total of 34 questionnaires to supervisors and store personnel on the appointment dates. For the questionnaires all copies also delivered in person and collected back after an hour.

The most common data collection procedures are;

#### 3.3.1 Secondary Data

Secondary data is historical data structures of variables previously collected and assembled for some research problem or opportunity situation other than the current situation. Secondary data is a viable source of information which provides comparative and contextual information that can result in other discoveries. Internal and external secondary data includes stock take records, meetings minutes and journals (Shiu et al, 2009).

#### 3.3.2 Primary data

Primary data is the specific information collected by the person who is doing the research. It is the information that is collected specifically for the purpose of the research project. It can be obtained through three primary methods, questionnaires, interviews and observation (Barker 2013). The researcher used questionnaires and interviews to collect data for the study.

#### 3.4 Research Instruments

A number of research instruments are used including questionnaires, discussion groups, observations, experiment and interviews for data collection (Bax, 2013). Information used in this research was obtained from engaging in open-end interviews and distributing questionnaires to target population.

#### 3.4.1 Questionnaire

Questionnaire is a structured technique for data collection that consists of a series of questions, written or verbal that a respondent answers. A questionnaire consists of a set of questions presented to respondents. Because of its flexibility, it is by far the most common instrument used to collect primary data (Kotler and Keller 2012).

The researcher designed a structured questionnaire to collect data from target population. The questionnaire gave the mostly busy respondents direction and quick answering as they were straight to the point. The respondents also got confidents from the secrecy clause attached to the questionnaire (See appendix 3).

#### 3.4.2 Interviews

Interview encompasses presentation of verbal stimuli and reply in terms of oral answers. An interview facilitates the disclosure of more information as they are open end questions and the researcher can record and take down notes during the interview. More qualitative and quantitative data is disclosed as questions can be clarified for a better understanding by the respondents (Kothari, 2004).

Doing interviews was favourable as it enabled the researcher to ask deeper questions and even ask for further explanation so as to deeply understand how a certain act or situation affect the company performance. Interviews also enabled the researcher to adjust the questions so as to acquire enough information during the interview. (See appendix 2)

#### 3.5 Validity and Reliability

#### 3.5.1 Validity

Validity is the degree to which a research instrument serves the purpose it was constructed to perform and the extent to which the conclusions drawn from an experiment are true (Shiu et al, 2009). The researcher passed the instruments to the research supervisor and other people to

analyse if they serve their purpose and produce accurate results. The researcher then corrected the observed errors.

#### 3.5.2 Reliability

Reliability relates to consistency of results over a period of time. An instrument is reliable if it produces invariable results when measurements are repeated again (Shukla, 2008). The researcher worked with the research supervisor to ensure that data acquired through interviews, and questionnaires address the research questions. Straight to the point questions to enhance the reliability of the questionnaires and interviews.

#### 3.6 Data Presentation and Analysis

Data from the respondents was presented and analysed through tables, graphs and explanatory narrations. Explanatory narrations were used to observe the qualitative data. Quantitative data collected was presented, interpreted and analysed using tables and graphs.

#### 3.7 Summary

This chapter focused on research methodology, research design, sample frame and data collection methods. Explanatory research design and descriptive research design were used in the study. Both quantitative and qualitative data presentations were used in the research study. The following chapter will focus on data presentation and analysis of findings.

#### **Chapter 4**

#### **Data Presentation and Analyses**

#### 4.0 Introduction

This chapter focuses on presentation and analyses of data on physical stock loss, operational failures, products valuing discrepancy and intercompany fraud.

#### 4.1 Response rate from target population

The researcher issued out 34 questionnaires to Choppies Supermarket Mkoba Branch supervisors, and staff members and did 4 interviews with the management.

Table 4.1 response rate of target population

Target	Research	Sample Size	Respondents	Response
population	Instrument(s)		Achieved	Rate%
Supervisors	Questionnaires	12	12	100
<b>Store Personnel</b>	Questionnaires	22	20	91
Totals	Questionnaires	34	32	94

Out of 34 questionnaires distributed, 32 were answered and returned which gives a 94% response rate. As 32 individuals responded their number was above 30 individuals, which means their distribution mean is close to normal distributions mean (Sunders et al, 2008). This justifies their responses gives reliable interpretation and analysis for the study.

#### **4.2 Physical Stock Loss**

The researcher sought to establish physical stock loses through merchandise theft, damaged merchandise, and spoilages negatively affect the attainment of desired sales targets. This was in light of the fact procured product for resale will no longer be available to generate the targeted sale revenues.

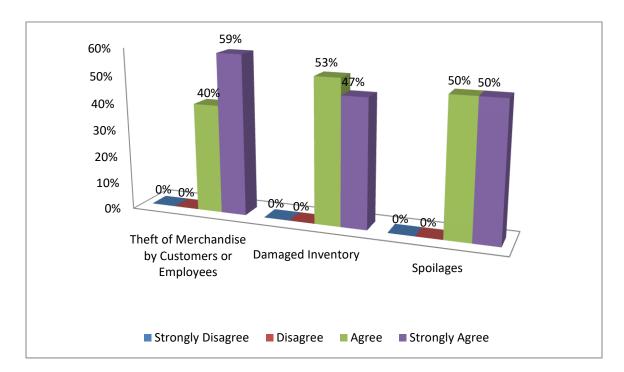


Figure 4.2; Effects of physical stock loss on sales targets

As illustrated above respondents agreed and strongly agreed to the forms of physical stock loss and their effect on sales targets. 59% of respondents and 50% of respondents strongly agreed respectively, that theft of merchandise and merchandise spoilages hampers meeting of desired sales targets. Another 47% of responds rate strongly agreed that damaged inventory impedes achievement of desired sales targets. This concludes that any form of physical stock loss impedes the company from achieving its preset sales targets as lost products equals lost sales revenues.

#### **4.3 Product Valuing Discrepancy**

The researcher sought to establish fraudulent refunds, price markdowns and products overpricing impedes attainment of set profit targets.

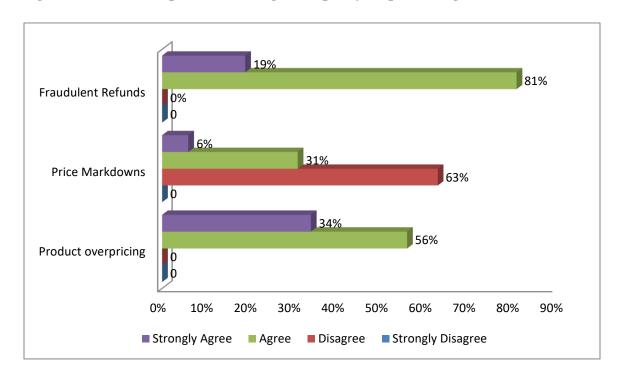


Figure 4.3: Effects of product valuing discrepancy on profit targets.

In fig above, respondents established products overpricing and fraudulent refunds hinders the achievement of desired profit targets. On the other hand, respondents also disagreed with 64% rating that price markdowns obscure attainment of profit targets. As Choppies superstore customers are mostly price sensitive customers who are always in search of low prices; this is why the respondents have shown greater disapproval of the fact, as markdowns will attract and make the customers buy more than they want. 56% and 81% strongly agreed that product over pricing and fraudulent refunds respectively obstacles attainment of targeted profit levels as they both scare away price sensitive customers and illegally override previously processed sales respectively, which undermines efforts to generate extra profits by the company (The Global Retail Theft Barometer, 2008).

#### 4.4 Operational failures

The researcher sought to establish process failures in form of in-audit stock count errors, products data errors misplaced products and missing employees disrupt the quality of services delivery to customers resulting in customer dissatisfaction.

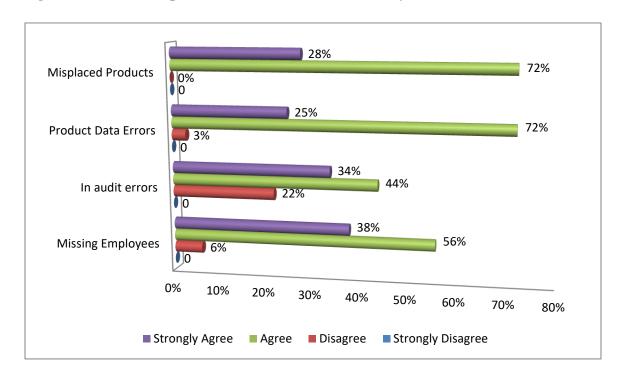


Figure 4.4: Effects of process failures on service delivery

As illustrated above 56%, 72%, 72% and 44% of respondents' rates on missing employees, misplaced products, products data errors and in-audit stock count errors respectively strongly agreed results in poor service delivery. This is as products will not be available on shelves or their data is incorrect resulting in longer queuing time and customers not be able to purchase and enjoy the products making the shopping trip a horrible experience (Sutherland, 2013). Also fewer employees remaining employees working will be overwhelmed by workloads and are not able to give customers the quality of service and experience they desire (Crossmatch, 2014). These concludes that operational screw ups disrupt quality of customers' shopping experience as Choppies Supermarket Mkoba Branch will not be performing at full productivity levels

#### 4.5 Intercompany Fraud

The researcher sought to establish intercompany fraud increases costs of doing business for retailers. This was in light of vendors' ability and willingness to bribe and shower store employees with money and gifts so that they will be cooperative.

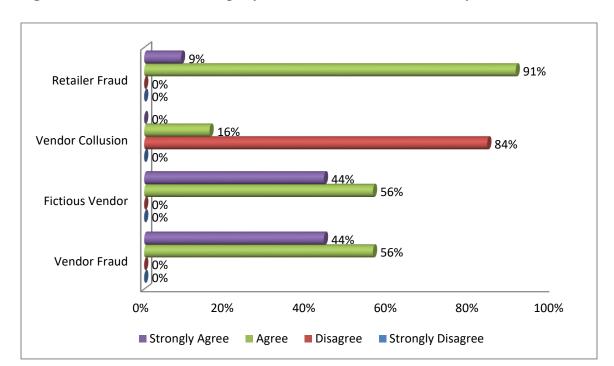


Figure 4.5: Effects of intercompany fraud on store's cost efficiency.

In the fig most responds strongly agreed to vendor fraud with 56% support rate and fictitious company 56% support rate, that they undermining retailer's cost management capabilities and render its efforts to maintain lower costs useless, by increasing costs incurred by retailer which is a sign of poor company performance. On the other hand, 9% agreed and 91% strong supported that Choppies Superstore defraud vendors as a strategy to minimise and transfer own shrinkage costs. However, 84% of respondents denied that vendor collusions with employees would result in illegal deals such as overpayments, procurement of too much or poor quality merchandise, which increases costs incurred by Choppies Superstore. As this question was asked to store management and personnel, it was prone to denial as they may have felt being the targets. But some who are honesty enough 15% of respondents do agreed that vendor collusion with store employees hurts the store at all levels of doing business as stated by (Kennish, 2011).

#### 4.6 Analyses of Interviews

Out of 4 interviews proposed 3 were successfully carried out giving a responses rate of 75%.

#### 4.6.1 Inefficiencies at till point

Respondents assured that customer will be forced to queue long times and errors processing transactions will result in either stealing from customers or Choppies superstore. On one hand stealing from the store is when the till operator either undercharges products or gives out more change than tendered that is depriving the company from generating expected profit targets. On the other hand, stealing from customers is either overcharging them or giving them less change than tendered that is depriving them of their hard earned money and security.

#### **4.6.2** How fraudulent voids

Respondents ascertained that, fraudulent voids cancel previous sales rendering fewer sales for the company than actually achieved. This makes Choppies superstore to lose its investments in form of cash interceptions and sales revenues as they will be cancelled and no sale is processed. The costs suffered by the store will increase as the resource which should be generating revenues for the store will be used to defraud it. In conclusion the costs to be suffered by Choppies superstore is not only in fewer sales revenues than targeted, but also in investments as cash will be stolen directly from the business operations

#### 4.6.3 Vendor short delivery and Overcharging

Responds settled that Choppies superstore will pay more money for the goods received than it should pay. This will increase the costs incurred by the company that is lessening profits generated form targeted as some sales revenues will be used to cover the cost of goods sold that will be higher than normal. Another cost that will lessen the profits generated are shrinkage costs which will arise after stock counts and system stock will be more than actual physical stock. These costs will be covered by sales revenues which translates to more costs than targeted and fewer profits than targeted which is a poor performance characteristic (Beck, 2009).

#### 4.6.4 Merchandise spoilages

Responds ascertained most fruits and vegetables in Choppies superstore cost higher than offered by the hawks and other store in Mkoba, so customers prefer to buy outside the shop often. This then makes the demand of perishables to fluctuate resulting spoilages being disposed of without returning the investment used to procuring and refrigerate them. This supports the fact every purchase made by store is an investment of money and resources such as refrigerators. When products spoil or expire, they will be disposed of and no sale or cash is recovered from those spoiled perishables. This means the store would have lost both cash invested and sales revenues expected (Wyman 2014).

#### 4.6.5 Products under-pricing error

Respondents stated under-priced products have a lower selling price than the preset price which generates targeted sales revenues. This concludes that fewer profits or even loses will be realised than envisioned profit targets. This is as the selling price if too low will be under the costs prices making every sale a loss making transaction accumulating to final net losses at the bottom line. Which in-turn will lower the net worth of the company at the end of the financial trading period (Clodfelter, 2014).

#### 4.6.6 Products undercharging

Responds fixed that products under ringing are like theft of products as the products will leave the store without a sale realised from them. This concludes if no sale was realised from products procure for resale. Then the Choppies superstore will suffer not only fewer sales revenues than expected from the products, but also higher costs incurred emanating for costs of the uncharged merchandise and also operating costs which would have been covered by the sale of the uncharged products. These costs will eat into the profits of Choppies superstore and the higher they get will disseminate the investments of the company and reduce its net worth.

#### 4.7 Summary

Data was presented and findings analysed in accordance with the research objectives and questions.

#### Chapter 5

#### **Conclusions and Recommendations**

#### 5.1 Introduction

The research topic to the study was on effect of shrinkage on company performance: Case of Choppies Supermarket Mkoba Branch. The research study was guided by these objectives;

- > Effect of physical stock loss on sales target.
- Effect of products valuing discrepancy on targeted profitability.
- Effect of operation failures on service delivery.
- > Effect of intercompany fraud on cost efficiency.

#### 5.1.1 Physical stock loss.

Most responds to distributed questionnaires agreed physical stock loss impedes the performance of the company. 53% strongly agreed that damaged products, product theft and spoilages reduce sales revenues generated from stock. In conclusion, losing physical stock reduces the sales revenues to be generated and makes the attainment of desired sales target impractical. Too much physical stock loss will result in heavy losses in the bottom line and poor company performance.

#### 5.1.2 Products valuing discrepancy.

Respondents assured that products valuing discrepancy hinders the achievement of desired profits levels. 34% of respondents strongly agreed refund fraud, sales under ringing and fraudulent voids shrinks profit margins generated and also 62% of the same respondents disagreed that price markdowns reduces desired profitability levels. These concludes, to a greater extent product valuing errors obscures generation of desired profit levels as products will be sold a lower prices than preset to achieve the desired profit targets. Also price mark downs improves profit generation as costs will be properly managed to boost profitability from the strategy.

#### 5.1.3 Operational failures.

Respondents to questionnaires have agreed that operational failures disrupt quality of service delivery. 53% strongly agreed that employee's time theft, point of sale inefficiencies, in-audit stock count errors, check out errors, and misplaced stock keeping units reduces level of productivity. All these findings conclude operational failures downgrades productivity causing

poor service delivery by Choppies Supermarket Mkoba Branch resulting in customers' dissatisfactions.

#### 5.1.4 Intercompany fraud.

In questionnaires distributed responds showed that intercompany fraud increases the costs incurred and both parties defraud another. 44% of respondent strongly agreed vendor fraud, fictitious company; collusion with employees, short delivery, vendor overcharges impairs retailer's efforts to maintain costs lower or at manageable levels. This concludes that vendor fraud increases costs incurred by Choppies Supermarket Mkoba Branch. Also Choppies Supermarket Mkoba Branch is suffering high shrinkages and tries to get rid of it through defrauding vendors by transferring own costs to them.

#### **5.2 Recommendations**

For retail stores to achieve their performance targets, they have to take greater and innovative measures toward shrinkage. The following recommendations can be useful to the following factors;

#### 5.2.1 Physical product loss.

The retail stores must try to minimise or eliminate physical products losses through reducing their causes. The store must put strict handling and storage procedures which make sure that employees will transfer, handle, pack and store products in a manner that they would not break products. These include giving fragile products their own special storage area which does not mix them with other products. Lastly employ the use of trolleys when transferring products from storerooms onto store shelves.

The store must procure its perishables in light of demand and not in light of customers' seduction. This will help in improving cost efficiency and return on the investments made in order to procure, store and sale the products.

In order to combat theft, the store must employ tight security measures both to customers and employees. It must take active measures for those caught stealing so as to make an example of them so that others thinking or trying to do so will throw away their sinister ambitions.

#### **5.2.2 Product valuing discrepancy**

The store must give a single person or manager the responsibility and accountability of correctly entering the received products into the store system. This would reduce the occurrence of inaccurate product inputting into the store system, and when it happens the one accountable for the job will be penalised.

#### 5.2.3 Operational failures.

To curb screw ups during operations, stores must have strict standards, job descriptions, rules, procedures and norms for every employee to adhere to. This optimises the way of doing business which in turn makes it efficient. As most operational inefficiencies are due to unclear job descriptions, setting them out would make responsible personnel accountable and this improves the performance of all employees.

#### **5.2.4 Intercompany Fraud**

Retailers and vendors must come to terms and find ways of working together. This enables improved performance as they will practice actions which support mutual gain instead of defrauding another. When retailers and vendors work together, they can come up with a strategic plan to combat shrinkages and work on it which will improve their performances without selling more goods than they previously sold. To deter vendors fraudulent activities, the store must closely monitor and evaluate its vendors. It must then make an example with some of its vendors by cancelling business contracts with them so that others will quickly learn. It must also employee more security personnel to check on every delivery made by the vendors.

#### **5.3 Suggestions for Future Researches**

- a. This research focused on Choppies Supermarket Mkoba Branch. Shrinkage can affect any business establishment in any industry, so more research needs to be done in different business establishments and industries so that the intensity of the problem can be fully revealed.
- b. As the research focused on the impact of shrinkage on company performance, future researches needs to focus on the strategies to combat the shrinkage so as to improve company performance.
- c. As this study was meant for academic use as it only gave an insight on the problem issue. Future studies meant for professional use have to be carried so as to give a professional in-depth look at the problem.

#### REFERENCE LIST

Aradhna, (2013) When Wal-Mart enters: How incumbent retailers react and how this affects their sales outcomes. Journal of Marketing Research, 4(2), pp.577-593.

Association of Certified Fraud Examiners, (2012) **Point Of Sale Fraud; Stealing Cash Receipts.** Brisbane. Mc Mullein

Bailey. A, (2006) "**Retail Employee Theft: A Theory of Planned Behaviour Perspective"**, International Journal of Retail and Distribution Management, Vol. 3; pp. 802 – 816

Balmer. A (2012) Retail Product Management: Buying and Merchandising. New York. McGraw Hill

Bamfield.J, (2006) **SedQuisCustodiet? Employee Theft in UK Retailing**. International Journal of Retail and Distribution Management. 3.1: 845-859.

Bartholomew, (2012) Latest Global Retail Theft Barometer Study Finds Shrink Up. George Cohen. GCC, Inc.

Beck. A, (2007). Shrinkage In Europe 2004: A Survey of Stock Loss in the Fast Moving Consumer Goods Sector. Brussels: ECR Europe.

Beck. A, (2008). Preventing Retail Shrinkage: Measuring the 'Value' Of CCTV, EAS and Data Mining Tools. Brussels: ECR Europe.

Beck. A, (2009). Self-scan checkouts and retail loss: Understanding the risk and minimising the threat. Leicester: University Of Leicester, Department Of Criminology

Beck. A and Peacock. C, (2009) **New Loss Prevention; Redefining Shrinkage Management Hampshire**. Palgrave. Macmillan

Beck. A and Peacock. C, (2016).**Redefining Shrinkage-Four New Buckets of Stock Loss.** Loss Prevention Magazine, pp.: 35-42.

Beck. A and Peacock. C, (2011) Inventory control with a cash register: Sales recorded but not demand or shrinkage. Brussels: ECR Europe.

Bremen. H, (2016) Managing Loses in the retail Store; A Comparison of Loss Prevention Activity. International Journal of Retail and Distribution Management. Vol 1; pp. 61-101

Broughton, (2016) Combating retail Theft: Programs and Strategies. Stoneham, MA. Butterworth

Bush, (2013) Crime and Security: Managing the risk of Safe Shopping. Leicester. Perpetuity Press

Castillo, (2009) **Convenience Sampling Retrieved** [Date of Retrieval 22- Septmber-2016] from Experiment Resources. Available at http://www.experiment-resources.com/convenience-sampling.html.

Chapman, Gillian; Robson, Pam (2016) **Art from Packaging: With Projects Using Cardboard, Plastics, Foil, and Tape.** New York. Heinemann Library

Chapman. P and Robson. C, (2016) **Art From Packaging: With Projects Using Cardboard, Plastics, Foil, And Tape**. New Jersey. Heinemann Library

Chapman, P and Templar, S (2006). **Methods for Measuring Shrinkage**. Security Journal; Vol 1. Iss.2/3.pp 19

Clarke, R. (2010) Hot Products: Understanding, Anticipating And Reducing Demand for Stolen Goods. Home Office Police Research Series No. 112.London: HMSO.

Clodfelter. R, (2014) Retail Buying From Basics to Fashion. 2nd Edition. New York. New York Times

Cole. C. A, (2012) The Barometer: A study of the cost of merchandise theft and merchandise availability for the global retail industry. Available at http://www.GlobalRetailTheftBarometer.com

Crossmatch, (2014) **Preserving Profits: Attacking Fraud &Theft At The Point Of Sale**. Available at http://www.crossmatch.Com

Dunne, P. M, Lusch, R. F and Griffith. D. A, (2012). **Retailing 4<sup>th</sup>Edition**. Harcourt. Fort Worth

Ekblom. H, (2014) **Developments\_in\_Mobile\_Retail\_Scanning\_Tech.pd.** International Journal of Retail and Distribution Management. Vol 2: pp. 120-150

Fin. G. A, (2004) Conducting Research Literature Reviews: From the Internet to Paper 2nd Edition. California. SAGE Publications

Fleisch. A and Tellkamp. H. J, (2014) Quantifying the costs of cycle counting in a two-echelon supply chain with multiple items. Business Journal. Vol 2; pp52-75

Food Marketing Institute, (2013) **The 2013 National Supermarket Shrink Survey** | **The 2013 National**. Available at http://www.theshrinksurvey.com/

Gilbert, D. (2003). Retail Marketing Management.2nd Edition. Edinburg Gate. Prentice Hall.

Gilbert, A, (2006) Methods for Measuring Shrinkage-2006. Security Journal V1 N4 pp. 228-240

Gilboa. D, Donoho. D. L and Johnstone. J, (2008) **Security and Shrink Analysis**. Security Journal V 2 pp. 22-52

Gilkey. J, (2012) **Shrinkage, shoplifting and the cost of retail crime in Europe: a cross-sectional analysis of major retailers in 16 European countries**. International Journal of Retail and Distribution Management. Vol. 2, No 1, pp. 235–241.

Grasso, S. (2013). 11<sup>th</sup>Annual Retail Crime Survey 2013. London. British Retail Consortium.

Guthrie. P, (2006) Hot Spots in the Supply Chain: Developing an Understanding of What Makes Some Retail Stores Vulnerable to Shrinkage. Brussels. ECR Europe.

Faruk. D, (2015) 11th Annual Retail Crime Survey 2015. London. British Retail Consortium.

Hayes. R, (2007) **Retail Security and Loss Prevention 2<sup>nd</sup>Edition**. New York. Palgrave Macmillan

Harris, A and Rebekah, H. K. (2015) The Five Ss of Retail Operations: A Model and Tool for

**Improvement**. International Journal of Retail and Distribution Management. Vol. 3; pp. 518–528.

Hollinger. R. C and Adams. A, (2008).**2008 National Retail Security Survey: Final Report Gainesville.** Florida. University Of Florida

Holweg. C, Teller. C and Kotzab. H, (2016) "Unsaleable Grocery Products, Their Residual Value and in store Logistics". International Journal of Physical Distribution and Logistics Management, Vol. 2 Iss2/7 Pp. 634 - 658

Hubbard, (2006) Guide to Preventing Workplace Fraud – Chubb. New York. McGraw Hill

Kouki. C, (2010) **Optimal Stocking of Retail Outlets: The Case of Weekly Demand Pattern**. International Journal of Physical Distribution and Logistics Management. Vol. 2 Iss1/3; 205-251

Jin. Q and Sternquist. T (2004) Using a Behaviour-Based Method to Identify and Reduce Employee Theft. International Journal of Retail and Distribution Management. Vol. 2, pp. 442–451.

Joseph (2007) An investigation of the perception of employees about how to stop Shrinkage at a selected retail supermarket in Cape Town. International Journal of Retail and Distribution Management. Vol. 2; pp. 250-351

Leaver, (2007) Legal and Social Changes Affecting UK Retailers' Response to Consumer Theft. International Journal of Retail & Distribution Management. Vol. 3pp. 29–33.

Livingston. Z, (2014) **Participate in the Global Retail Theft Barometer in 2014**. Available at http://www.GlobalRetailTheftBarometer.com

Martínez. H and Montaner. J, (2006) Home Office Police Research. London: HMSO.

Meth. A, (2014) **Hot Products: Understanding, Anticipating and Reducing Demand for Stolen Goods**. International Journal of Retail and Distribution Management. Vol 2.pp 52

McGoey. C. E, (2015) Retail Loss Prevention; Employee Theft. Brisbane. Aegis Books Inc.

Mura. R, (2015) Solutions Advisor At Gunnebo; Cash Handling | Entrance Control | Electronic Article Surveillance | CCTV. Available at http://www.gunnebo.com

National Retail Federation (2014) Centre for Retail Research. Florida. Florida University

National Retail Federation (2015) National Retail Security Survey. Florida. Florida University

Qing Li, PeiwenYuandXiaoli Wu, (2016) **Managing Perishable Inventories in Retailing: Replenishment, Clearance Sales, and Segregation**. International Journal of Retail and Distribution Management. Vol. 3; 117

Robert. G, Davis, J.L and Langton. L, (2010) **Shoplifting.** Burlington. Butterworth-Heinemann.

Sutherland. J, (2013) Shrink Dinks Part I: Retail and Office Market Demand. Colorado. Prime-Incorporated

The American Payroll Association, (2014) Preserving Profits. Available http://www.americanpayroll.org

The Global Retail Theft Barometer, (2008) **Checkpoint Systems, Inc., 2008.** Retrieved from http://www.retailresearch.org/grtb\_currentsurvey.php.

Wyman. O, (2014) A Retailer's Recipe; Fresher Food and Far Less Shrink. California. SAGE Publications

Kuklin. P, (2013) Commentary: The Impact of Checkout Time on Customer Service Perception. Available at http://www.retailcustomerexperience.com

Kennish (2011) Employee Theft: A Systems Approach. The Internal Auditor. Vol.2. pp. 269.

Pekeur. K, (2014) An Investigation into the factors affecting customer satisfaction at the

Western Cape Office of the Consumer Protector in South Africa. International Journal of Retail and Distribution Management. Vol. 2; 52-115

Kokemuller (2007)

Kouki. S, (2010) Perishable items Inventory Management and the Use of Time Temperature Integrators Technology. Paris. Centrale

Kotler and Keller (2012) Shrinking retail shrink using analytics to help detect fraud and grow margins. London. Deloitte Forensic Centre

Kothari, (2004). Return Fraud Survey 2012. Survey data was provided by 60 U.S. retail participants in November2012.Retrievedfromhttp://www.nrf.com/modules.php?name

Zane. A, (2013) **As Shoplifters Use High-Tech Scams, Retail Losses Rise.** Wall Street Journal Online October 25, 2006. Retrieved from http://people.ischool.berkeley.edu

### Midlands State University



Established 2000 APPENDIX 1: LETTER OF APPROVAL

Stand No 5960
CIPF Building Mkoba 6
Gweru
Tel; 26354 251 008
27 September 2016
Midlands State University
Faculty of Commerce
P Bag 9055
Gweru
Dear Sir/Madam
RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH AT YOUR ORGANISATION
I am a final year student with Midlands State University doing B. Com (Hons) Degree in Retail and Logistics Management.
In partial fulfilment of the requirement of the degree programme, i am seeking permission to use your company Choppies Superstores as a case study on the topic, "The effect of shrinkage on company performance." The information obtained from this research study will be strictly for academic purposes and will be treated with utmost confidentiality.
Regards;
WISEMAN K VHENGE Registration No.:R123019M
Approved / Disapproved
For and on behalf of Choppies Superstores Mkoba Branch
Name:Signature:
Designation: Date:

# Midlands State Established 2000 University



#### APPENDIX 2; RESEARCH INTERVIEW GUIDE FOR MANAGEMENT

My name is Wiseman K Vhenge. I am a final year student at Midlands State University studying Bachelor of Commerce Retail and Logistics Management Honours Degree. It is a requirement that every student carry out an academic research as a partial fulfilment of the requirements of the Bachelor of Commerce Retail and Logistics Management Honours Degree. My research topic is: **The effect of shrinkage on company performance; Case of Choppies Supermarket Gweru Branch.** 

#### Interview;

- 1 How does inefficiencies (errors) at point of sale cause inconveniences at customers?
- 2 How do customers feel and think about the shop if they cannot find the product they want/need on the shelf?
- 3 How do data error(s) in recording inventory in store system affect customers who want to buy that product?
- 4 How does short delivery by suppliers or distribution centre affect the store?
- 5 How does supplier overcharging of the supplied products affect the store revenues?
- 6 How does shoplifting affect sales target?
- 7 How does spoiled perishables contribute to sales and financial lose?
- 8 How products under-pricing affects attaining of target profits?
- 9 How does under ringing (not scanning of other products at the till point) of products affect profitability?
- 10 How do fraudulent voids cause cash loss and increased costs?

## Midlands State Established 2000 University



APPENDIX 3; RESEARCH QUESTIONNAIRE

This questionnaire has been prepared by Wiseman K Vhenge, a final year student studying Bachelor of Commerce Retail and Logistics Management Honours Degree at Midlands State University. The research study is a partial fulfilment of the requirements of Bachelor of Commerce Retail and Logistics Management Honours Degree for the student to complete the degree programme. The research topic is: The effect of shrinkage on company performance; Case of Choppies Supermarket Gweru Branch.

#### **Instructions:**

Please respond by ticking in a box corresponding to your desired response

Please do not write your name anywhere on this questionnaire

Kindly assist by completing this questionnaire.

All information shall be treated with utmost confidentiality and used solely for academic purposes

#### Questionnaire

#### SECTION A; operational failure on service delivery

		1	2	3	4
1	Do operational failures cause disruptions in quality service delivery to				
	customers?				
2	Do missing employee(s) cause disruptions in productivity and service delivery?				
6	Does an error in in-audit stock count cause stock outs as some products will not				
	be replenished in timely fashion?				
4	Do data errors steal time from employees' current duty as they have to correct				
	them?				
5	Does misplaced products cause loss of sales as customers cannot find and buy				
	the product?				

#### SECTION B; intercompany fraud on cost efficiency

		1	2	3	4	5
1	Do vendor frauds negatively impact store's cost efficiency?					
2	Does payment to a fictitious vendor increases the costs incurred by the					
	company?					
3	Does vendor collusion with employees cause purchase of poor quality					
	products, too much products and illegal payments which costs the company?					
4	Does the company try to cover its own shrinkage by returning fewer, and /or					
	expired products to the vendors?					

#### SECTION C; physical stock loss on sales target

		1	2	3	4	5
1	Does losing the physical stock negatively affect the set sales target value?					
2	Do staff theft of merchandise cause lost sales of the stolen merchandise?					
3	Does employee theft of customer property and money in the shop causes					
	lost sales as customers will opt not to visit the shop again?					
4	Do damaged inventory cause lost sales and other costs associated with					
	inventory purchasing, holding and disposal?					

#### SECTION D; product valuing discrepancy on target profitability

		1	2	3	4	5
1	Do products' valuing discrepancies negatively affect store profitability?					
2	Does over pricing of products leads to lost sales as customers opt buying somewhere?					
3	Do price markdowns negatively affect target profits as they could not be achieved?					
4	Do fraudulent refunds reap store profits as money will be given out for products returned but stolen or not belonging to the company?					