

# Integrated Strategies for Mitigating Stock Shrinkage in Retail Enterprises

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## Abstract

This study provides a critical analysis of the effectiveness of the strategies for managing the multidimensional nature of stock shrinkage in the contemporary South African retail enterprises. While using a qualitative research method, a meta-synthesis of different core theories on the strategies for managing stock shrinkage in a retail setting was undertaken and triangulated with the approach for managing stock shrinkage in the South African retail enterprises. Findings indicated the effectiveness of the process for mitigating stock shrinkage among retailers to be fraught by poor enforceability of laws against prime sources of stock shrinkage such as fraud and theft by customers, employees, supply chain crews and criminal shoplifters. Results of the analysis also revealed the reliability of in-store security technologies like sensormatic and video surveillance cameras is inhibited by employees' conspiracies and involvement in activities that cause stock shrinkage. Sadly, it was found that most of the existing theories and practices in the modern South African retail enterprises exhibit only reactive and piecemeal approach to managing stock shrinkage. This paper fills such a gap by postulating a more proactive integrated framework of strategies emphasising the need for managers to consider stock shrinkage as part of the enterprise-wide risk management framework. Other strategies in the framework articulated the essence for improving the remuneration of retail employees, synchronisation of human and technological intelligence systems, and undertaking corporate social responsibility to reduce the emergence of criminal gangs involved in shoplifting.

**Keywords:** integrated strategies; mitigating stock shrinkage; performance

## 1. Introduction

Measures for managing stock shrinkage have often only been limited to the application of back-end-inventory and accounting systems (Fox, Metters & Semple 2006). However, empirical facts signify that considering the multidimensional nature of stock shrinkage in the contemporary retail enterprises, accounting measures may not titillate effective identification and mitigation of all sources of stock shrinkage (Smith & Achabal 2008; Fox et al. 2006; Xiaoling & Tatiana 2008). Coupled with the increasing economic difficulties leading to the proliferation of criminal gangs that have turned shoplifting into a trade, and the increasing evidently unethical retail employees and managers that in total are causing annual losses of about R5.1 billion, it is apparent that stock shrinkage is a vice that threatens the future sustainability of the modern South African retail sector (Hunt, 2011; Govender, 2013). A galaxy of strategies emphasising a stronger linkage between enterprise risk management and stock shrinkage, the use of a combination of human and technological intelligence, and undertaking corporate social responsibility to reduce the emergence of criminal gangs involved in shoplifting seems to be a viable alternative approach (Weldon, 2014; Ray, 2013). Unfortunately, most of the studies in South Africa have largely focused on only either the evaluation of the sources of stock shrinkage or just the over-emphasis of technology as the appropriate measures for the South African retailers to identify and diffuse all sources of stock shrinkage (Hunt, 2011; Govender, 2013). Undertaking a narrow approach limits the extent to which retailers are able to replicate an integrated framework that can be used for effective mitigation and management of all the sources of stock shrinkage. It is against that backdrop that a meta-synthesis is undertaken in this paper to assess the integrated set of strategies that can be suggested for mitigating the sources of stock shrinkage in the modern South African retail enterprises.

## 2. Literature Review

Stock shrinkage refers to the loss or the reduction in the inventory or stock that a retailer or supermarket operators face in the interval between the point of manufacture or purchase from suppliers to point of sale in retailers' stores (Beck, 2007:28). The sources of stock shrinkage in the modern retail enterprises are deeply rooted in the economic hardships that the surrounding communities face (Beck, 2007:28). Other causes of stock shrinkage are linked to poor remuneration and cultures of unethical practices in most of the modern retail enterprises (Govender, 2013). This implies that an attempt to undertake measures such as the increment in the investment of security technologies without the accompanying comprehensive approach that tackles the actual

root causes of stock shrinkage may tend to undermine the extent to which the modern retailers are able to mitigate losses caused by stock shrinkage (Govender, 2013; Oliphant & Oliphant, 2011).

It also signifies that for all sources of stock shrinkage to be effectively identified and diffused, the use of a comprehensive set of different strategies encompassing measures for transforming employees' behaviours and addressing their concerns are critical prerequisites (Weldon, 2014; Ray, 2013). Besides highlighting the essence of fostering collaboration with community forums to counter sources of stock shrinkage before they occur, and the undertaking of a comprehensive and predictive analysis of data to provide real-time insights on the probable sources of stock shrinkage, Lin (2006:270) agrees with Oliphant and Oliphant (2011:442) that fostering a culture of organisational ownership would also create a sense of ownership among employees to enable them evaluate their decisions and act more responsibly.

However, Govender (2013) cautions that in the absence of appropriate motivational strategies such as the provision of incentives, the process for managing stock shrinkage can be fraught with the difficulty of fostering a sense of organisational ownership among employees. Trends in the South Africa retail enterprises imply that behavioural change and transformation are largely lacking. As instead, there seems to be significant reliance on recent invention and application of the in-store technologies such as sensormatic, video surveillance cameras, SMART EAS and source tagging (Felson, 2006; Checkpoint Systems, 2013).

With the increasing number of poorly paid employees, supervisors and managers getting involved in activities that cause stock shrinkage, it is unfortunate that conspiracies between fellow employees; and between employees working in critical positions with customers or criminal gangs can undermine the overall functionality of in-store security technologies (Xiaoling & Tatiana, 2008; Bamfield, 2004). Govender (2013) highlights that even though many modern South African retailers have invested significantly in the in-store security technologies; it is still difficult to reduce the internal causes of stock shrink.

Although some of the causes of stock shrinkage can be effectively managed using the existing criminal procedures, the unwillingness of the police to prosecute shoplifters, and hefty costs associated with the time involved and fees of hiring attorneys and advocates seem deterring (Hunt, 2011; Govender, 2013). Yet, at the same time, retail operators cannot take the law into their own hands (Hunt, 2011; Govender, 2013). All these signify that a dilemma as to which strategies are appropriate for managing stock shrinkage remains one of the complex questions that most of the modern South African retail operators are yet to resolve. In other words, as it is illustrated in the research problem statement, there seems to be a challenge in the measures which the modern South African retail enterprises are using for identification and mitigation of the sources of stock shrinkage.

### **3. Problem Statement**

Lack of use of a comprehensive strategy undermines the ability of the modern South African retail enterprises to effectively identify and mitigate all the modern complex sources of stock shrinkage. Such a view explains why even in the midst of the implementation of different measures, it is still evident that most of the South African retail enterprises have been unable to effectively identify and diffuse all the sources of stock shrinkage.

### **4. Purpose of the Research**

The main purpose of this research is to identify the sets of complex sources of stock shrinkage among the South African retail enterprises so as to determine a framework of the integrated strategies that can be suggested for managing stock shrinkage in the modern South African retail enterprises.

### **5. Methodology**

While drawing from the views of Boghossian (2011:488) and Cronin, Ryan and Coughlan's (2008:38), this paper used conceptual analysis as the main qualitative research technique. It involved systematic review and a meta-synthesis accomplished according to the three main steps that are aligned to the three main research questions that include:

- What do the views in the modern contemporary theories on stock shrinkage highlight as the major sources of stock shrinkage and the strategies used by the modern retail enterprises for identifying and mitigating the sources of stock shrinkage more effectively?
- What are the major causes of stock shrinkage in the modern South African retail enterprises and how effective have been the strategies which the South African retail executives have undertaken for managing stock shrinkage?

- Which framework would provide the appropriate integrated sets of comprehensive strategies that can be suggested for managing stock shrinkage in the modern South African retail enterprises?

In a bid to seek possible answers to these questions, a meta-synthesis was used as a technique for conceptual analysis to synthesis views in the core contemporary theories on stock shrinkage so as to identify the major sources of stock shrinkage and the strategies used by the modern retail enterprises for identifying and mitigating stock shrinkage. A synthesis was also undertaken in the assessment of empirical and non-empirical studies which have been conducted since 2000 to 2015 (the past 15 years) on the sources of stock shrinkage and the strategies that the South African retailers have so far put in place.

It is not only the documents reflecting trends on stock shrinkage in the modern South African retail enterprises that were examined, but also government documents such as the South African Crime Report (2014) and documents from the security service providers like ADT security and Hi-tech Security Solution. Thereafter, the findings on the sources of stock shrinkage and the strategies being used by the South African retailers were analysed and compared with the views in core theories on stock shrinkage to assess how effective have been the strategies which the South African retail executives have undertaken for managing stock shrinkage. With this information gained, the third research question was addressed by examining the kind of integrated sets of comprehensive strategies that can be suggested for managing stock shrinkage in the modern South African retail enterprises. The details of the findings were as presented and discussed in the next section.

## 6. Results

In line with the descriptions in the methodology section, the findings of theoretical analysis are presented according to the two main sections that include:

- Contemporary theories on stock shrinkage in modern retail enterprises
- Trends on stock shrinkage in the modern South African retail enterprises

The details are evaluated as follows.

### 6.1 Contemporary Theories: Stock Shrinkage in Modern Retail Enterprises

The argument that the modern sources of stock shrinkage has turned more complex to be effectively mitigated using only a single strategy is accentuated in the fact that the analysis of the contemporaries indicate the causes of stock shrinkage can comprise of certain intricate complex internal or external factors that are as illustrated in Figure 1 (Dubois, Scheffler & Bearnse, 2014; Bamfield, 2004; Donnell, 2005; Gibendi, 2014; Mbarirer, 2014; Global Retail Theft Barometer-GRTB, 2012).

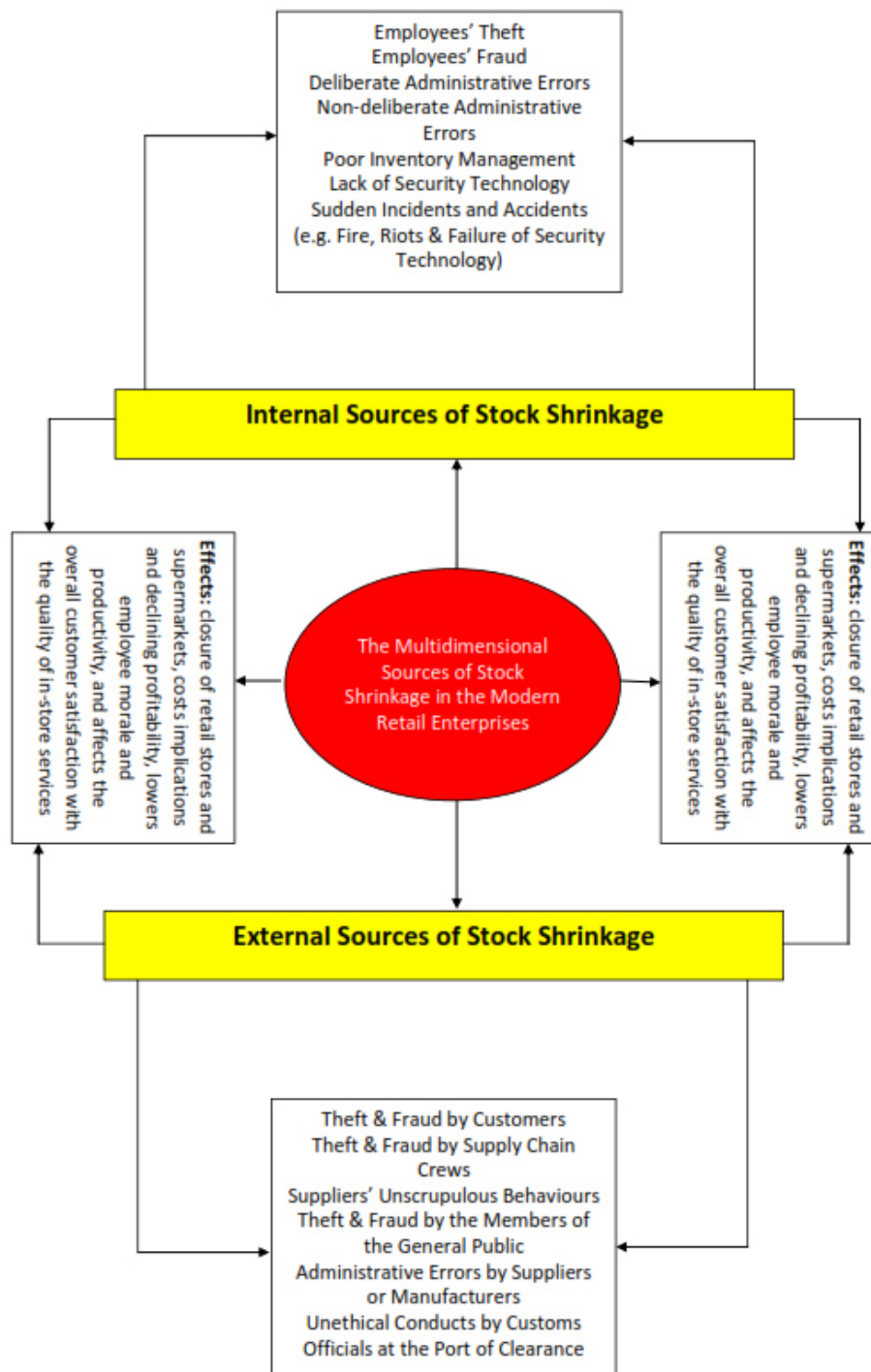
#### 6.1.1 Internal Sources of Stock Shrinkage

Internal sources of stock shrinkage can arise from employees' theft, employees' fraud, deliberate administrative errors, non-deliberate administrative errors, poor inventory management, lack of security technology, and sudden incidents and accidents associated with fire, riots and failure of security technologies (Donnell, 2005; Gibendi, 2014; Mbarirer, 2014; Global Retail Theft Barometer-GRTB, 2012). Shrinkage linked to theft or the employees' fraudulent activities is explained by the fact that in instances where employees are dissatisfied with certain aspects of the organisational policies such as the overall remuneration policy of the company, studies have confirmed a stronger preponderance of the employees to engage in deliberate theft of company stock as one of the easiest ways for them to avenge their anger (Donnell, 2005; Hollinger & Clark, 2013). The effects are latent in the fact that whereas shrinkage linked to other sources such as non-deliberate administrative errors and poor inventory management are easily controllable, employee related sources of stock shrinkage are often more difficult to manage (Dubois et al. 2014:46; Bamfield, 2004:235). This is accentuated in the fact that employees, supervisors and managers who are supposed to be part of the preventers of stock shrinkage are instead part of the culprits.

Despite theft fuelled by dissatisfactions with the internal company policies, Donnell (2005:5) highlights that in criminology studies, findings signify that some of the employees just end up engaging in theft because of the behaviours shaped by the environment in which they grew up in. In such circumstances, Donnell (2005:5) emphasises that thorough background check is a prerequisite for ensuring that all those who are taken as the employees are the people with suitable behaviours and characters. Beck (2007:28) argues that although the use of security guards, cameras and security tags can lead to the minimisation of such causes of stock shrinkage, it is important that retailers and supermarket operators get abreast of the different forms of theft and fraud. Internal

theft or fraud is referred by Beck (2007:28) to also be known as sweet-heating or sliding in which the employee mainly working at the point of sale passes goods without scanning the bar codes of the products through the till or any form of electronic system. Donnell (2005:5) and Bernstein (2010) point out that although there are different internal causes of stock shrinkage, the common causes of stock shrinkage are stock theft by the internal employees because quite often, little attention is paid towards theft by the employees as compared to the possibility of theft by a customer.

**Figure 1:** Multidimensional Sources of Stock Shrinkage in the Modern Retail Enterprises



**Source:** Researcher's own construct as derived from the interpretation of different theories on the causes of stock shrinkage in the modern retail enterprises

In effect, they argue that employees usually find themselves with a lot of free space to do as they wish. Hollinger and Clark (2013:19) suggest that for all internal sources of stock shrinkage to be identified and eliminated, it is important that retailers and supermarket operators objectively conduct assessments of all possible sources of stock shrinkage without prejudicial conclusion about any possible sources of stock shrinkage. Tracey, Lim and Vonderembse (2005:179) reveal that non-intentional administrative error can arise from the situation where the store management over estimates the demand for certain perishable products, and produces only for a lot of the products to be damaged or spoilt. Besides deliberate administrative errors or the failure of security technology, Hollinger and Clark (2013:19) highlight that quite often employees at points of sales (POS) are at liberty to engage in activities that facilitate theft by outsiders, discount abuse, refund abuse and credit card abuse. Meanwhile, Donnell (2005:5), Bernstein (2010), Fox, Metters and Semple (2006:389) and Lee and Keiner (2011:14) note that the multidimensional nature of stock shrinkage implies that its possible sources may not only be internal, but also external.

### *6.1.2 External Sources of Stock Shrinkage*

Theoretical analysis implies that the external sources of stock shrinkage include; theft and fraud by customers, theft and fraud by supply chain crews, suppliers' unscrupulous behaviours, theft and fraud by the members of the general public, administrative errors by suppliers or manufacturers and unethical conducts by customs' officials at the port of clearance (Michael, 2007; Varma, Wadhwa & Deshmukh, 2006; Vijayaraman & Osyk, 2006; Fox et al. 2006:389). In a study conducted on the sources of stock shrinkage in retail outlets in Kenya, Gibendi (2014) notes that besides shoplifting from customers, well organised criminal gangs comprising of about 5 to 10 members have turned shoplifting into an industry from which they can fend living. In this endeavour, they are known to storm major retail outlets in numbers disguised as customers and position themselves in strategic locations, as the rest of the crews distract shopfloor employees. The effect is that by the time they are leaving, each of them would have ripped the retail outlet off goods worth about Ksh25 000 to Ksh 100 000. The implication of all these is reflected in the fact that the Kenyan retail sector is estimated to be losing about Ksh 3 billion annually as a result of shoplifting perpetrated by the employees, customers and organised criminal gangs (Mabrirer, 2014).

In the past, shoplifting was considered as theft out of desperation from poverty and largely ignored by the legislators and the criminal justice system (Gibendi, 2014; Mabrirer, 2014). However, now that it has evolved to encompass more lethal well organised criminals that threaten not only the sustainability of Kenya's retail sector, but also the country's investment environment and the security of the nation, it is unfortunate that the criminal justice system and the government still continue to treat it as petty crimes (Gibendi, 2014; Mabrirer, 2014). Besides stock shrinkage linked to shoplifting, Fox et al. (2006:389) explain that shrinkage can either arise from packaging fewer quantities of stock than the amount ordered, or theft along the way by the transporter's staffs, or just mere administrative errors or theft and fraudulent activities by the employees of the suppliers, manufacturers or wholesalers. External theft is noted by Beck (2007:28) to be linked to shoplifting which are usually caused by the intentional stealing of stock by vendors or some other members of the public.

Fox et al. (2006:389) argue that even if retailers and supermarket operators intended to deal effectively with the causes of stock shrinkage, the limitations would still arise from the fact that the nature of stock shrinkage is multidimensional. These authors highlight that the multidimensional nature of shrinkage is usually reflected in the fact that it can arise from administration errors such as shipping errors, warehouse discrepancies and misplaced goods. Such a view is echoed in Lee and Keiner's (2011:14) assertion that the other causes are linked to the cashier or price check errors which are done often in customers' favours, stock damaged whilst in transit or in the store, paperwork errors and risks associated with perishable goods which are not sold within their self-life. Lee and Keiner (2011:14) explain that shrinkage linked to perishable products arises in circumstances where perishable goods which are out of date are ordered and delivered, but no one at the supermarket management checks the dates, or the store manager just accepts the product because he or she aims to deal with the shortage in the store and delight customers.

With time, if not all the products are sold, Lee and Keiner (2011) reveal that shrinkage arises from the fact that the goods may turn more perishable to the extent that it is not reasonably possible for the retailers or supermarket operators to recuperate the losses. Michael (2007), Varma et al. (2006) and Vijayaraman and Osyk (2006) that share similar views that unless appropriate mitigating measures are put in place, the overall negative implications of stock shrinkage on the performance of the modern retail and supermarkets can be enormous. As it is illustrated in Figure 1, such negative implications may include the risk of causing the closure of retail stores and supermarkets, associated cost implications and declining profitability, and the fact that it can affect the overall customer satisfaction with the quality of in-store services. Considering the multidimensional nature of stock

shrinkage, Tracey et al. (2005:179) and Fox et al. (2006:389) believe that although the use of a comprehensive system would influence the reduction of stock shrinkage, it is unfortunate that in most instances the measures for mitigating stock shrinkage have often been piecemeal to thereby undermine the extent to which all sources of stock shrinkage are able to be identified and mitigated. Such a view implies that for retailers to identify and diffuse the sources of stock shrinkage, they need to use a combination of certain internal and external measures.

## **6.2 Trends: Stock Shrinkage in the South African Retail Enterprises**

Govender (2013:4), Clark & Gohar (2012) and Skade (2012) share similar views that the notion of shoplifting as the major cause of stock shrinkage in the South African retail stores has become widely entrenched because it was often viewed as trivial in the eyes of the general public. Skade (2012) argues that the negative implications of all these became latent in the fact that shoplifting by members of poor communities and lowly paid employees was often politicised, and viewed as trivial as compared to certain retail stores and supermarkets that are viewed as exploitative and making enormous profits. With such general public perception that indirectly supported shoplifting, Govender (2013:4) posits that shoplifting became embedded as part of the culture in poor communities to thereby render it difficult for retail operators to deal with it as a major cause of stock shrinkage. Although the South African Crime Report (2014) and Koekhove (2010) highlight that ever since, the rate of stock shrinkage linked to burglary and robbery has been declining due to strong actions by retail operators, security companies and the South African police, Govender (2013:4) highlights that the findings of the surveys conducted across the country still revealed that less than 50 of the apprehended shoplifters are handed over to the criminal justice system.

Partly, he concurs with Hunt (2011:11) and ADT Security (2014) that the reasons are related to the fact that as compared to the smaller items stolen, pursuing a justice process takes a lot of time and costs. Despite the overriding effects of low convictions about pursuing such cases, these authors also highlight that most of the crimes related to shoplifting usually attract only fines or very minimal penalties. This implies that community members are not deterred from further engaging in shoplifting which is still a major cause of stock shrinkage among the modern South African retailers. Taking actions by the shop owners and security personnel by beating the apprehended culprits has often been the option (Fouche & Wilkinson, 2012). However, trends indicate that most of the retailers or security personnel who have engaged in such practices have often been accused of contravening the law by taking actions into their own hands. It therefore signifies that most of the modern retail stores and supermarkets stand at a cross-roads as far as the appropriate measures that can be used to curtail shoplifting as a major source of stock shrinkage are concerned (Govender, 2013:4; Clark & Gohar, 2012; Skade, 2012).

In other words, it is a challenge for retailers to deal with direct criminals who engage in shoplifting. ADT Security (2014) posits that managing shrinkage arising from fraudulent genuine customers, employees, suppliers and administration seem even more daunting. It notes that customers playing tricks by taking several goods whereby some goods get passed without payment is causing the retailers significant difficulties for retailers to prevent shrinkage linked to customer theft. Often, it has been the case to get security personnel to search each and every customer entering and leaving stores. However, since then, trends indicate that some of the retailers have abandoned such practices for fear of scaring customers who are afraid of being humiliated through the search processes even if they are innocent (Kohne & Pekeur, 2014). In a bid to use such a measure to attain competitiveness among the retailers who focus on searching customers, Kohne and Pekeur (2014) posits that most of the retailers have invested enormously in in-store security technologies such as CCTV cameras and the use of sensors. However, Hunt (2011:11) points that as time unfolded, criminal gangs have also discovered new methods of circumventing being detected by sensors.

In this approach, they explain that criminals use foil bags in which stolen goods are stuffed and passed through the sensors without being detected. All these affect the effectiveness of the technologies which retailers are using to control shrinkage related to customer theft and shoplifting. As much as some of the retailers have been keen at upgrading their shrinkage control systems, Hunt (2011:11) notes that most of the retailers have been quite reluctant to thereby become more vulnerable to stock shrinkage. Besides challenges linked to controlling shoplifting and customer theft, Govender (2013) highlighted that the common sources of stock shrinkage in retail stores are perpetrated by the employees themselves, suppliers and administrative errors. He states that across the conducted studies, it has been confirmed that although total shrinkage was found to account for nearly a quarter of retail profit, only 83.3% of shrinkage was attributed to crime, as the largest percentage was noted to be related to administrative errors.

Clark & Gohar (2012) reveal that the internal sources of shrinkage mainly perpetrated by the in-store employees, managers and supervisors, or the crews along the supply chain renders it difficult for the South African retail owners and managers to effectively reduce the causes of shrinkage. This view is anchored in the fact that with employees linked to activities that cause stock shrinkage, it may tend to be difficult to have the same employees implement measures that can reduce the internal causes of stock shrink. Certainly such a view explains why Koekhove (2010) highlights that even though many modern South African retailers have invested significantly in the in-store security technologies such as sensormatic, video surveillance cameras, SMART EAS and source tagging, it is still difficult to reduce the internal causes of stock shrink. This is because even some of the employees who are in charge of these security apparatus usually connive with the other employees to facilitate activities that cause stock shrinkage. Hunt (2011:11) argues that the common factors that explain why employees engage in theft and fraudulent activities are linked to low rates of pay, non-existence of profit sharing schemes, high staff turnover, higher proportion of part time staff, and poor store management. Although most human resource departments have not taken the initiatives to deal with such human resource related causes of stock shrinkage, ADT Security (2014) reveals that so far trends indicate that the expenditure on other measures for controlling stock shrinkage has been in about ZAR 691 million commencing from June 2010.

## 7. Discussion

It is apparent from both the core theories and trends on stock shrinkage in the modern South African retail and supermarkets that the common employee related factors that cause stock shrinkage in the modern South African retail stores and supermarkets include; low rates of pay, non-existence of profit sharing schemes, high staff turnover and higher proportion of part time staff. The management related factors include; lack of effective plan for managing stock shrinkage, lack of enforcement of a culture for mitigating stock shrinkage, emphasis of the use of technologies, and poor monitoring and evaluation. Such a finding echoes the views of Oliphant and Oliphant (2011:442) and Gozycki, Johnson and Lee (2004) that indicate that the measures that can efficiently contribute to the reduction of stock shrinkage can be approached at the four main levels of the retail operations that include the strategic level, cultural level, organisational level and operational level.

However, such measures still fall short of the measures that can be prescribed for managing stock shrinkage in the modern South African retail enterprises. This is accentuated by the fact that none of these authors bother to deal with how improving employees' remuneration and elimination of the usually higher percentage of the dissatisfied part time employees can lure employees away from engaging in activities that cause stock shrinkage. It is true that trends indicate that the causes of stock shrinkage linked to burglary and robbery have largely been reduced due to the intense collaboration and concerted effort by the South African Retailers Association and the South African Police as well as the other security agencies and the communities. However, the overall loss to shrinkage standing at the cost of ZAR 5.1 Billion is still too high (Fernie & Sparks, 2004:19). Such higher rate of loss to stock shrinkage explains the extent to which the strategies which are used by the modern South African retail enterprises are still largely ineffective. Effective reduction in stock shrinkage would require coordinated strategic actions involving all employees and other key stakeholders.

The core contemporary theories on the management of stock shrinkage indicate that the strategies which are used by the modern retailers and supermarket operators to control stock shrinkage include; investment in security and surveillance technologies, communication and discussions of the appropriate measures with employees, the use of human intelligence, constant review and upgrade of the security system, and recruitment of personnel to fill gaps. It would also require stronger lobbying, liaising and collaboration with government and non-governmental organisations to ensure that relevant legislations are put in place to deal with theft of items from retail stores and supermarkets in a manner that deters the rest of the community members from getting involved. However, it is apparent from the overview of trends on stock shrinkage in the South African retail enterprises that there is a stronger preponderance of most retailers to heavily rely on technological investment without taking cognizant of factors such as the root causes of employee theft and coordinated internal actions with security that cause stock shrinkage (Govender, 2013:4; Clark & Gohar, 2012; Skade, 2012). Such approach undermines the effective use of the initiatives that tackle the root causes of stock shrinkage in the modern retail enterprises from their source. In effect, what the executives in the modern South African retail stores need to do to effectively identify and manage the rising rate of stock shrinkage are as evaluated under the managerial implications.

## 8. Managerial Implications

In the context of the illustration in Figure 2, it is argued that the South African retail executives can only be able to effectively manage and diffuse all sources of stock shrinkage by undertaking a more integrated approach explained by four constructs that include; the integration of stock shrinkage as part of the process of risk identification and management during the strategic planning process. It will also entail the building of a business

case against stock shrinkage so as to gain the necessary management commitment and improve the amount of the allocated resources. The other constructs involve profiling the internal and external sources of stock shrinkages, creating a continuum of human and technological intelligence systems, and monitoring and evaluation to enhance identification and elimination of all sources of stock shrinkage.

The integration of stock shrinkage as part of risk identification and management framework influences the extent to which the managers are able to integrate the notion of stock shrinkage as part of the critical risks that must be identified and mitigated in the process of strategy formulation and implementation. Previously and among most of the retailers, findings imply that stock shrinkage is still regarded as minor vices that can easily be addressed through accountants and those in procurement departments. However, through the integration of the notion of stock shrinkage in the process of strategy formulation and implementation, the results of the external environmental analysis may tend to reveal more likely complex changes in future economic conditions. By gaining such information, it can become easier for the retail executives to put in place the necessary precautionary measures to prevent certain events that can cause stock shrinkage from occurring.

It is noted in Figure 2 that for such measures to be effective, it must be accompanied by building a business case that renders it possible for all the top managers to buy in the concept that effective identification and mitigation of the sources of stock shrinkage is a prerequisite if the modern retail enterprises are to operate more effectively. Such approach can enable retail executives become more committed and devote sufficient resources towards the development and implementation of the measures for the identification and mitigation of the sources of stock shrinkage. After the management's buy-in and allocation of sufficient resources, the next process that must be accomplished involve profiling both the internal and the external sources of stock shrinkage. In line with the illustration in Figure 2, the internal sources of stock shrinkage that must be watched include; employees' theft, employees' fraud, deliberate administrative errors, non-deliberate administrative errors, and poor inventory management, lack of security technology, and sudden incidents and accidents associated with fire, riots and failure of security technology.

The external possible sources of stock shrinkage that must be profiled encompass; theft and fraud by customers, theft and fraud by supply chain crews, burglary and robbery, suppliers' unscrupulous behaviours, theft and fraud by the members of the general public, administrative errors by suppliers or manufacturers and unethical conducts by customs officials at the port of clearance. After all possible sources of stock shrinkage have been profiled, Figure 2 implies that the key aspects of the human intelligence system that must be considered include; the appointment of secret loss prevention staffs in all key departments to identify, track trends and report all incidents and probable incidents most likely to cause stock shrinkage. The other measure would require the use of external human intelligence from community members to foil robbery, organised criminal shoplifters, and burglary and to identify any likely sources of stock shrinkage.

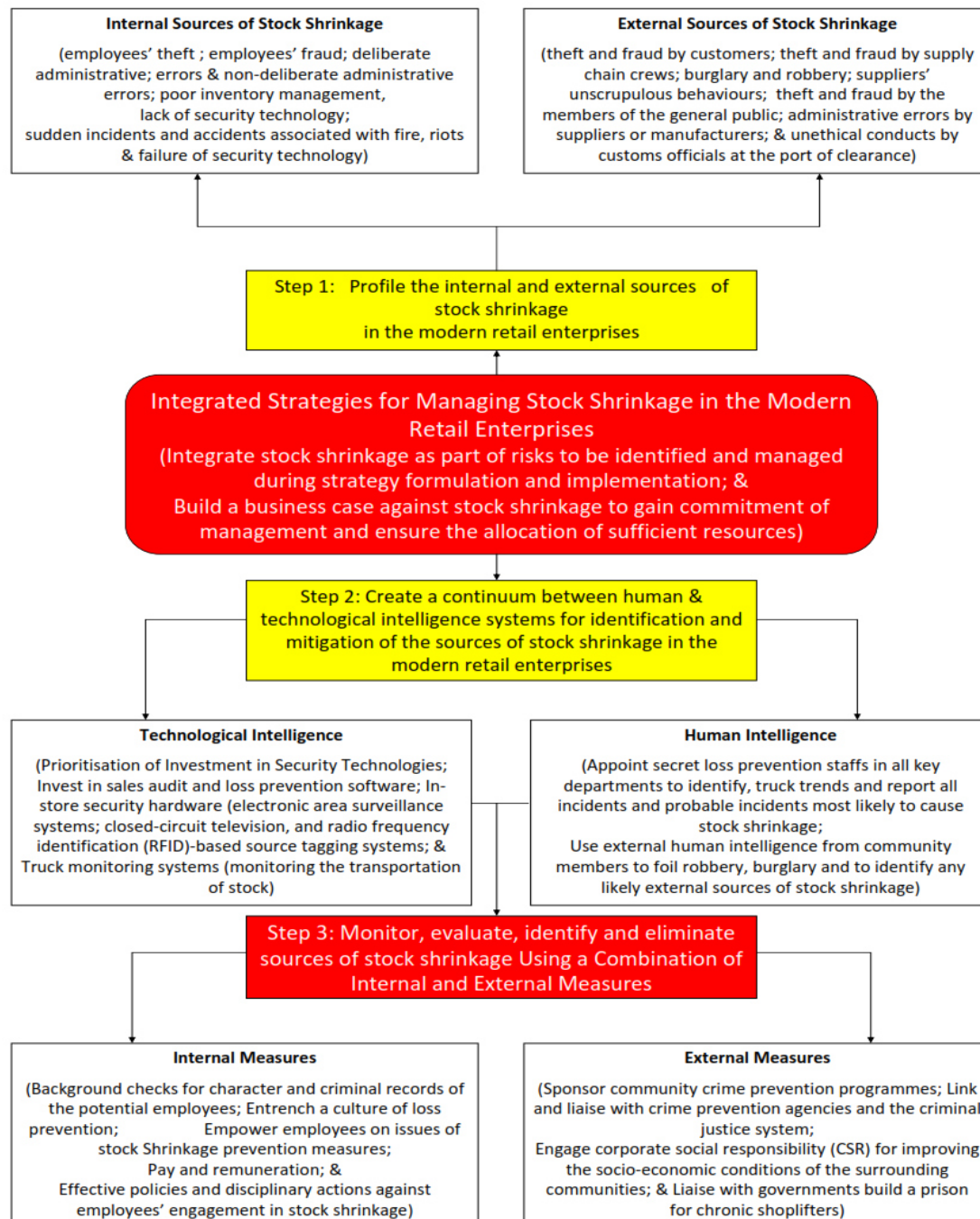
The effectiveness of the technological intelligence system would require the prioritisation of investment in security technologies that include; sales audit and loss prevention software, in-store Security Hardware (Electronic area Surveillance Systems, Closed-Circuit Television, and Radio Frequency Identification (RFID), and source tagging systems) as well as truck Monitoring Systems (Monitoring the Transportation of Stock). The use of employees who are spies will help reduce the sources of stock shrinkage linked to theft and unethical practices of the internal employees for the reason that since they are employees, they are often capable of doing things in a way that cannot easily be detected by cameras. With a continuum between the human and technological intelligence created, the actual process of monitoring, evaluation, identification and elimination of the sources of stock shrinkage can begin.

Although it is important that the possible sources of stock shrinkages are profiled, it is not necessary that the list of the sources of stock shrinkage is limited to only certain sources because stock shrinkage is dynamic and its sources keep changing as time evolves. As these processes of monitoring and evaluation are being accomplished, retail executives must also consider using certain internal and external measures. The internal measures that can be used to ensure that all the internal sources of stock shrinkage are identified and eliminated include; background checks for character and criminal records, entrenchment of a culture of loss prevention, empowerment of employees on issues of stock shrinkage prevention measures, improvement of pay and remuneration and the establishment of effective policies against employees' engagement in stock shrinkage. As on the other hand, the external measures that must also be undertaken simultaneously with the internal measures include; sponsoring community crime prevention programmes, linking and liaising with crime prevention agencies and the criminal justice system and engagement in corporate social responsibility (CSR) to improve the socio-economic conditions of the surrounding communities. In other words, through this integrated approach, it



is most certain that most of the modern retailers can be able to identify and minimise a lot of the sources of stock shrinkage.

**Figure 2:** Integrated Strategies for Managing Stock Shrinkage in the Modern South African Retail Enterprises



**Source:** Researcher's own construct as derived from the interpretation of different theories on the causes of stock shrinkage in the modern retail enterprises as well as the interpretation of empirical studies conducted on trends of stock shrinkage in the modern South African retail enterprises

### 9. Suggestion for Further Research

It is quite evident from the findings that most of the South African retail enterprises are affected by the increasing rate of stock shrinkage linked to theft from the communities and internal activities such as employees' theft and fraud. However, it is also apparent that right from the theories on the management of stock shrinkage to

the practices in the South African retail enterprises that there is a strong misconception that only the undertaking of effective internal measures would contribute towards the minimisation of the rate of stock shrinkage. As much as the internal measures are important, the use of a combination of internal and external measures is critical for not only reducing the reasons why certain employees engage in stock shrinkage, but also the tackling of certain economic difficulties and loopholes in legislations that lure most of the poor community members to engage in stock shrinkage. Although such measures are integrated in the framework in Figure 2, further research can explore how corporate social responsibility can be used to reduce the engagement of the community members in the activities that cause stock shrinkage in the contemporary South African retail enterprises.

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