

Shrinkage loss analysis, retail store and creamery company Toni**Análisis de pérdida por merma, de venta al detalle empresa tienda y cremería Toni**

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Abstract

In this paper is analyzed that a company's inventory is a non-monetary asset that represents the financial engine for the cash flow necessary for its operation, therefore, everything that directly affects it must be detected, corrected and supervised. Everything starts from its order to its reflection in the results or profits. That is why in this paper the analysis of the main causes that originate the loss in the inventory due to the loss or deterioration of the products in a company that sells to the general public due to the displacement, packaging, handling and expiration, identifying the degree of percentage impact on sales, by type of product, as well as the circumstances in which the staff causes them when it is related to inventory logistics, the customers themselves and also the causes in that the suppliers that supply the products affect their deterioration. The method for the investigation is mixed since it contains qualitative and quantitative aspects identified through the sources that have previously developed the subject and in the operational field of the company to finally obtain the impact that it causes to the utility of the company.

Shrinkage, Inventory, Loss, Financial

Resumen

El inventario de una empresa es un activo no monetario que representa el motor financiero para el flujo de efectivo necesario para su operatividad, por lo que, todo aquello que lo afecta directamente debe ser detectado, corregido y supervisado, desde su pedido hasta el reflejo en los resultados o utilidades, por lo anterior el objeto de estudio de la presente investigación es el análisis de las principales causas que originan la pérdida en el inventario por concepto de merma o deterioro de los productos en una empresa comercializadora al público en general por el desplazamiento, embalaje, manipuleo y la caducidad, identificando el grado de afectación porcentual a las ventas, por tipo de producto, así como las circunstancias en que el personal las ocasiona cuando está relacionado con la logística del inventario, los propios clientes y además las causas en que los proveedores que suministran los productos inciden en su deterioro. El método para la presente investigación es mixto ya que contiene aspectos cualitativos como cuantitativos identificados a través de las fuentes que previamente han desarrollado el tema y en el campo operativo de la empresa para obtener finalmente el impacto que ocasiona a la utilidad de la empresa.

Contracción, Inventario, Pérdida, Financiero

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Introduction

In Mexico, the standard that regulates the valuation, presentation and disclosure of inventories is Financial Reporting Standard C-4, which considers as inventories the items acquired for sale, those produced and in process, raw materials and other materials, on which the economic entity already has the risks and benefits. In particular, the present research was developed on one of the most pressing risks of the inventories of trading companies, the shrinkage or deterioration of the products, which causes a decrease in the expected economic benefits.

The problem that occurs in most companies with this activity is the high percentage of shrinkage that will become an expense according to the aforementioned standard, therefore the main causes were analyzed during their displacement in their showcases, the damages in the packaging, in the handling or loading of the same and the validity of their expiration before their sale, the above shows the importance, validity and actuality of the subject for MSMEs and the decrease of the impact on their profits through the correction and control of the circumstances that originate it internally and externally.

Hypothesis:

Losses due to shrinkage have a serious impact on the finances of a commercial enterprise.

Theoretical Framework

Shrinkage is the loss of value of inventories consisting of the difference between the stock of inventories as shown in the accounting

The difference between the stock shown in the accounting records and the actual stock in the company's warehouse.

The difference between waste and shrinkage is that waste has a resale value while shrinkage does not. In other words, both wastage and shrinkage are losses in inventory. However, wastage has a resale value (i.e., the stock can be sold at a lower price even though it has that wastage), while shrinkage does not (a stock with a shrinkage cannot be sold) (Donoso, 2017).

Shrinkage is also understood as the loss of any of the physical characteristics of the products obtained or, of any of the factors used to obtain them: their weight, volume, length, etc., when this occurs the company calculates the cost directly, obtaining the value of the products manufactured at the exit of the process, dividing the applicable costs of the period (Consumption of raw materials + Direct labor + General expenses) corresponding to the department where the shrinkage occurs, by the number of units at the exit of that center, discounting, therefore, the shrinkage.

A shrinkage can be caused by humidity, fire or theft, or also due to handling, logistics or storage errors, or even in the reception of the goods themselves, accepting deliveries of defective products and, therefore, unusable for sale or the production process. It is also possible that the error lies in the accounting itself, in which case the solution to the shrinkage is the same: the error does not always have to be in the actual stock count, although this is actually the most likely cause. (Software Delsol, n.d.)

Problem Statement

In every company, in the activities of industrialization and commercialization of a product, shrinkage occurs during production, storage and distribution operations.

A shrinkage is a loss or reduction of a certain number of goods or the updating of a stock that causes a fluctuation, that is, the difference between the content of the inventory books and the actual quantity of products or merchandise within an establishment, business or company that leads to a monetary loss.

The problem detected is a high percentage of shrinkage that represents a cost, which must be assumed by the company, so it is necessary to make an analysis for the detection of the causes, in order to identify, attack, reduce and control them, because they cause that in the production process, storage operation and distribution (sale), exceed the percentages of shrinkage allowed.

It is therefore essential to reduce the percentage of wastage, in order to increase productivity in the processes and activities that are carried out in order to have the necessary supply to meet market demand.

Methodology to be developed

One of the problems faced by micro, small and medium-sized companies is the losses caused by the shrinkage of merchandise, which in large sizes can even lead to the closure of many of them.

Research method

The research method is a mixed process since at the beginning the problem will be evaluated and the theoretical review of books, magazines and web sites that talk about the subject of merchandise shrinkage and the second stage will have a quantitative model where the factors that affect the losses of the businesses will be measured.

Procedure

It is a sequential type of research where the objective is of the first part was carried out through a qualitative and interpretative design, with varied and theoretical samples of documentary type, which determined the selection procedure, access and registration of the documentary sample to determine and analyze the causes or factors that affect the objective of this project, where the initial phase is the collection and analysis of qualitative data on shrinkage, losses, merchandise, inventory turnover, resulting in the State of the Art that was used to determine the instrument that will be used to obtain information to be analyzed and thus determine the risk factors in the companies. In a second quantitative stage, we focused on applying a diagnostic instrument where we could find all the risks due to shrinkage and analyze the causes for which many companies lose money or close their businesses.

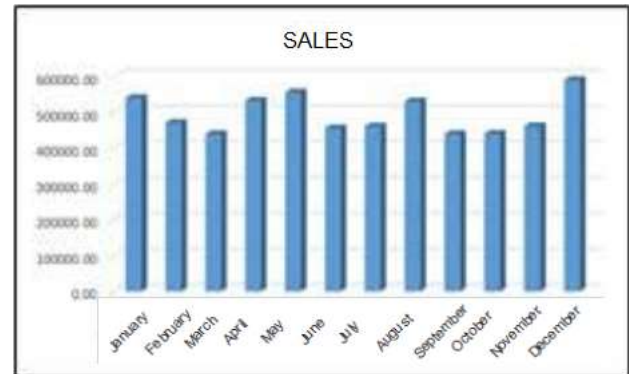
Results

Monthly sales 2019

After collecting the corresponding data on sales and shrinkage during 2019, the following results were obtained. Graph 1 shows the variations in monthly sales obtained during 2019, with January, April, May, August and December being the months with the highest sales.

Monthly sales:

January	\$540,122.01
April	\$532,092.00
August	\$530,230.00
December	\$590,231.11



Graph 1: monthly sales during the period 2019

Monthly shrinkage 2019

The loss generated by the concept of shrinkage did not vary greatly during the months of January through November, and although the loss was not reduced to an amount lower than the authorized amount of \$1700.00, it was absorbed thanks to the high sales generated in each month, without exceeding the percentage of 0.90% of the respective sales.

In contrast, in December there was a notable increase in the loss of \$10,032.29 and 1.70% of the total sales for the month. This is due to several factors that intervene, mainly the loss of merchandise, the bad capture of merchandise, that at the moment of receiving a larger quantity is captured than the one that is being reviewed, generating a shortage, directly impacting my inventory, the product damaged by packaging or handling.

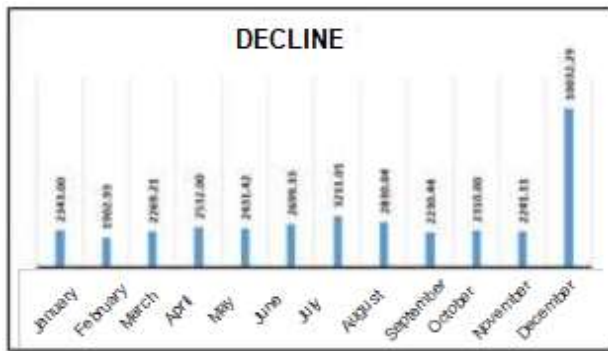
Shortages by category

In the current period, with respect to the pre-inventories carried out during the weeks elapsed, the following results were obtained regarding shortages in the different categories

Expired products by category

Of the total merchandise and with a lesser degree of commercialization of some products in sales, we can observe the total of expired products, because they have reached the limit of the date for their consumption.

Affecting three of the categories in TIENDA Y CREMETIA TONI, smoothies, yogurt, dairy products and soft drinks.



Graph 2 monthly decline during the period 2019

This generally happens due to the misapplication of the purchasing tool; when generating the purchase order, the sales for each product are not taken into account, the maximum stock is ignored, and since the products are products with little movement, this causes the merchandise in the warehouse to reach its expiration date.

As the products in the category of smoothies, yogurt and dairy products are perishable foods, they must be refrigerated or frozen for proper conservation in good condition, thus slowing the growth of microorganisms that are harmful to health.

Daily sales by category (soft drinks)

Daily sales of soft drinks are detailed, focusing on products with low sales and products with excess inventory, exceeding the maximum stock limit.

Product with the highest sales Coca cola 400ml: monthly sales of this product is 52 pieces per month, generating an average of 1.67 daily sales, based on the sales generated in March, based on the theoretical inventory, there are 45 pieces in stock, considerably exceeding the maximum stock which is 7 pieces.

Based on the estimated sales per day and according to the stock of the product, it can be said that the store could continue without making any purchase for more than 20 days without being out of stock.

Product with lower monthly sales

Coca cola light 600ml: unlike the other products, this is the one with the smallest displacement, with only 4 products sold during the whole month of March, generating an estimated daily sale of 0.13 pc. This directly affects the sale and stock of the 37-piece product. As a result, the company's excess product has no movement and reaches its expiration date.

Unlike the soft drinks category, which, although it also has the same facility for exchanges or returns due to expiration, this only applies up to a maximum amount of \$800 per expired product. This affects \$710.50 directly in loss due to shrinkage.

As can be seen in the previous graphs, weekly sales and the lack of product movement, resulting in overstocking and excess merchandise. This has a direct impact on the shrinkage loss.

Damaged by handling

It refers to the action and result of manipulating or manipulating, in executing, making, operating or elaborating by means of the hands a thing and object in manipulating to influence voluntarily to obtain an end. It is observed that there is a very serious problem in the company's collaborators, the loss by maneuver is too much in a month, this refers to the carelessness of the same staff when handling the product to take it to the sales floor or to the cold room, there is no care towards the merchandise.

There is a protocol for handling merchandise, but the practice is not carried out or the necessary care is not taken.

1. Take the box and take it to the sales floor (if the product has space on the sales floor and in the cold room, the product must be rotated and the merchandise with the shortest shelf life must be displayed in the cold room and the product with the longest shelf life must be displayed on the sales floor).
2. Use the blue safety cutter, so as not to damage the product and avoid any accident.
3. In case of bag, use the scissors with round tip.

Shrinkage due to handling or damage is not allowed, since they are provided with the necessary material and instructions on how to operate the merchandise in each replenishment of merchandise.

The product damaged by supplier, or any damage in the packaging, is considered as countable product for the specific month in the monthly inventory, for the next inventory if the change has not yet been made, it will be considered as damaged product due to handling and will directly affect the shrinkage loss.

Discussion

The above shows that there is a very serious problem in the company's collaborators, the loss due to handling is too much in a month, this refers to the carelessness of the same personnel when handling the product to take it to the sales floor or to the cold room, they do not take care of the merchandise.

Shrinkage due to handling or damage is not allowed, since they are provided with the necessary material and instructions on how to operate the merchandise at each restocking of merchandise.

The product damaged by the supplier, or any damage in the packaging, is considered as countable product for the specific month in the monthly inventory, for the next inventory if the change has not yet been made, it will be considered as damaged product due to handling and will directly affect the loss of shrinkage.

Financing

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Conclusions

Based on the analysis of the information obtained, four points of major importance were identified:

Displacement: a list of the products with the least displacement during this period was drawn up, based on daily sales per product.

Packaging: the products with the most damage due to the misuse of factory and transport packaging were identified, taking evidence and drawing up a total graph of damaged products due to handling.

On the expiration due to the use of the PEPS method (first in, first out) by not giving it the corresponding rotation.

Purchase order: one of the causes for having a high number of expired products is the excessive ordering, by not consulting the maximum stock generated by the purchasing tool. It is suggested to put in practice the induced sale to increase the displacement of some products, making packages or discounts. Placing a display and thus reduce the loss.

Give a course to store personnel on the use of the purchasing tool, how to consult the maximum stock of each product based on the daily sales of the last month and the application of the display process to reduce damage due to handling.

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