The in company store system, as a strategy for cost and inventory reduction and improving service level

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Abstract
This article aims - through an exploratory study in literature research and documental research with qualitative approach - to show a way to reduce the stock of a steel company deploying the 'Store in company', as a way to increase competitiveness. The results show inventory reduction and cost reduction.

Keywords: Stock inventory, Steel company, Store in company

INTRODUCTION

As Bowersox and Closs (2001 p. 561) said "The combination of slower economic growth and increased competition has forced companies in all sectors to focus on effective and efficient appropriation of logistical resources."

Thus, the reliable and accurate relationship between customers and suppliers can be considered increasingly essential in the quest for competitive advantage of companies, not only to ensure success but also for their survival, because in today's globalized market, competition is being improved every day in order to stand out among its rivals.

You can see that, in this scenario, to achieve maximum efficiency, companies need to diagnose their situation according to the market to identify the constraints that can affect their productivity.

Thus, companies now have greater concern about their operations and they tend to monitor and measure better their processes and activities seeking to assess their assertiveness to any adjustments that may be necessary because, as the father of modern management said, "One doesn't manage what is not measured " (DRUCKER, 1998, p. 32)

In this context it is important to be aware that maintaining stocks is one of the primary activities of logistics, because, according to Ballou (1993), along with other primary activities

(shipping and order processing) it make up the largest share of total logistics costs of an operation and it directly influences the coordination and efficient fulfillment of logistics goals.

Therefore, the focus of this study is the importance of maintaining stock linked to an alternative that would be the use of anin company store to optimize both costs and operational flows.

THEORETICAL FOUNDATION

One of the main supply logistics challenges is directly linked to the process of obtaining materials and inventory control at various locations, and, many times, the success or failure of the company is determined by the efficiency, effectiveness and domain to accomplish this management because it directly reflects to the level of service provided (FARIA E COSTA, 2005).

Supporting this thought, Barney (2012) reinforces that the structure of the purchasing process, linked to decisions taken in relation to the purchase of goods and / or procurement of services that are necessary for the maintenance of productive activities can mean the difference between success and failure of the company's operations.

It is also essential to point out that according to Chopra and Meindl (2006), the main reason for the existence of a supply chain is the customer’s needs satisfaction in a profit-generating process.

That is, all these processes must be carried out efficiently not only to satisfy the customer, but also and essentially in a productive manner that it provides the obtaining of the highest possible profitable operation.

Inventory control has great influence on the profitability of a company (Ballou, 2007). This provides new forms of relationship with suppliers, it improves the service level to meet the business competitiveness objectives in a competitive market and add value to customers and shareholders (ROBLES and ROBLES, 2009). When the management is inefficient, there may be various problems, from lack of material like to wrong delivery to the final customer, which will bring many problems to the company.

According to Faria and Costa (2005, p. 23) "The supply Logistics covers the activities carried out to put the materials and components (domestic and imported) available for production or distribution, using storage, handling, storage, transport and flow information techniques”. And, a steel industry is made up of various sectors needed for steel production known as manufacturing plants.

Thus, these units, on a large company, use on its transformation process, various products and materials, which can be divided into segments such as raw materials, supplementary materials, components, raw materials, work-in materials, assemblies, packaging material, finished products, production equipment, vehicles, maintenance materials and auxiliary materials (GASNIER, 2006).

The management of noncritical materials has caused positive and negative impacts in the steel industry. The fact that these materials are called noncritical does not mean that the company does not have to pay attention to them.

Efficient management is treated as a way to achieve competitiveness, reducing costs and increasing profits.

The creation of partnerships between customers and suppliers, an initiative that was originated from automakers and suppliers in the Japanese auto industry, has enabled reductions in fixed purchase costs by eliminating various activities that do not add value to the final consumer, only costs (WANKE, 2003).

A part of this context isthe stock sector, which is considered unproductive money in the business sector as, and the constant search for competitiveness forces companies to reduce costs.

Thus, the project to establish an in company store aims to work with non-critical or indirect materials, which interfere at the maintenance process of such equipment.

Since the ultimate goal of these partnerships between supplier and customer is frequent and reliable supply of small lot sizes, activities such as quality control, bids and price quotes were virtually eliminated in business relationship also leading to reduced response time from the placement to receiving the order (WANKE, 2003).

Chopra and Meindl (2003) points out that the role of stock in a company is strategic to make it more competitive, because when a company chooses to adopt a competitive strategy of keeping a large inventory, this choice will require a greater degree of responsibility from the managers on all activities involved to meet and manage this stock, and contrary to it, the company can become more efficient by reducing its inventory levels.

Also according to these authors, the great conflict of a company's choice on the issue of keeping or not stocks is between the responsibility for maintenance of larger inventories, and the resulting efficiency of smaller stocks, and the company needs to analyze what is more advantageous and strategically intelligent aimed at the long term and the needs of their customers. Only after a thorough analysis you can decide if it's better to keep a large high inventory or to reduce its inventory.

Ballou (2006, p. 359) states that "the quantity of each purchase and its time affect the prices to be paid, the transportation and maintenance costs of inventories." With this statement it is possible to identify four different variables involved in the purchasing decision process: quantity, price, shipping cost (freight) and inventory level.

To Martins and Alt (2009), stocks must function as regulators of flow of materials in the companies since the speed at which they arrive is different from the speed that is consumed or leave the company. In some instances, the need for a certain amount of material increases and decreases at other times, dampening variations. Stocks can be considered therefore, as the "lung" of the company whose size and capacity must be calculated according to the needs of the organization and its customers.

With the implementation of an in company store system, it will be possible to pass on a part of the inventory to be managed by another company. After quoting prices with interested and specialized companies in the sector established by the contractor, a location is given, with the main conditions so the store can hold its installation. From this point on, the process of providing the necessary materials on time begins.

It's impossible for a company to work with no inventory, because it acts as a buffer between the various stages of production to the final sale of the product (DIAS, 2006).

This is very close to the Just-in-time technique that involves working with minimum inventories, using only the necessary items in the necessary amount and at the right time to produce the demands of the company (SILVA, 2014).

It is valid to remember that Francischini (2002) does not consider the selection of materials in the buying process, because it is a conventional system of procurement of materials.

Thus, this effect could provide an essential fact for the company, where first, the material would be consumed and it would only be paid after a while, meeting the considered conventional system, so, the company buys a material and most of the time, pays it before using it.

Therefore, the aim of this paper is to present a way to reduce the inventory value avoiding anticipated financial disbursement.

In this context, Pozo (2010) emphasizes that a company can develop a good inventory management that would lead it to achieving a leading position to its competitors through efficient logistics of its inventory.

Especially regarding the importance of operating with low costs because the company can manage strategically both the storage of materials, parts, products as well as the acquisition of them, including the flow of information generated that should be managed with utmost care and preferably with the aid of a management software.

Thus, the logistics can contribute significantly in maximizing profits through efficient inventory management.

METHOD

It is an exploratory study of qualitative nature, using as its methodliterature and documentary search conducted from January to December 2014, in a steel company in the mechanical metal line.

The material for the maintenance of the equipment linked directly or not to the production, were selected by the ABC curve tool whose classification is used in connection with various units of measurements such as weight, time, volume, unit cost, etc. (POZO, 2007), and removing those considered strategic because in this case it is better to have material in stock not to take risks.

Doing so, the graph below shows that the company had, in 2014, about 60,000 items, where 2005 of them were elected to be acquired in company stores due to strategies defined by the company as the type of material and how easy it is to obtain it on the market in case of any shortages.

For this, a supply contract of the 2005 non-critical items were monitored, of the family of nuts, bolts and washers, corresponding to a portion of the "C" curve, which are materials of low value and high turnover.

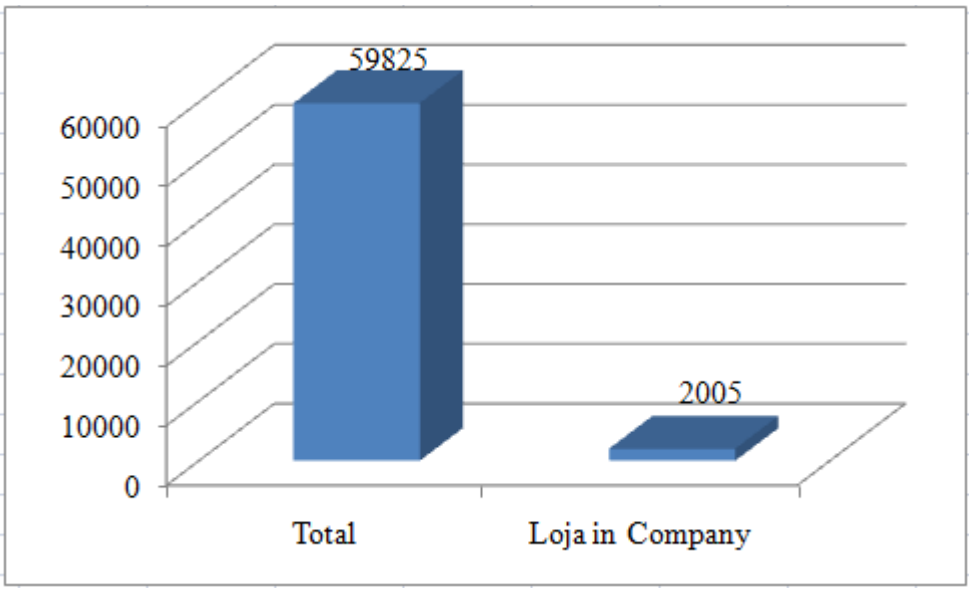

Figure 1 - Graph about the amount of items in 2014
Source: Prepared from the documentary research (2014)

Out of these 2005 items, 506 had a turnover, with 121,540 units consumed, amounting to R$ 210,862.20. The following graph shows the comparison between items with and without movement. One can disregard those which didn't have a forecast consumption and wasn't likely to have a turnover.

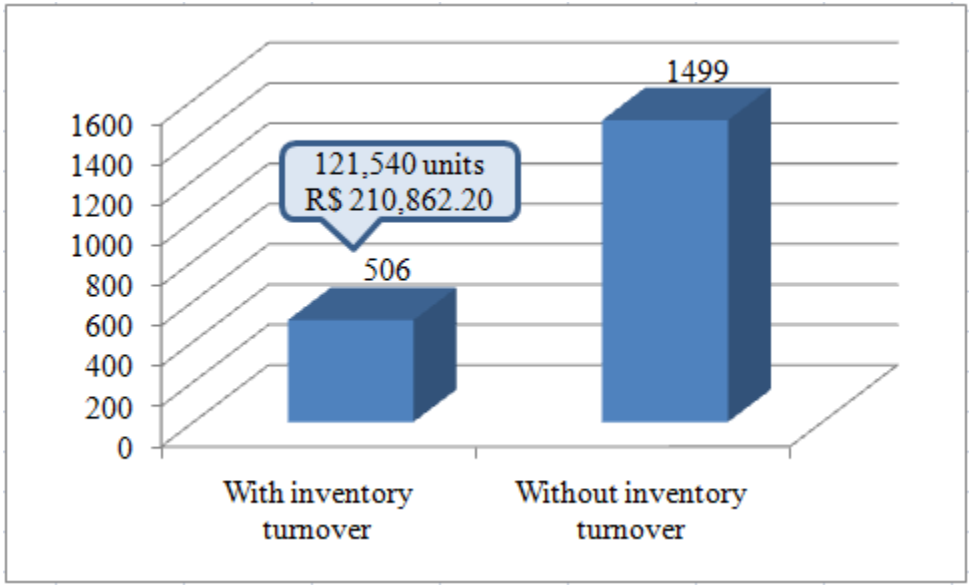

Figure 2 - Comparative graph with inventory turnover of the company materials
Source: Prepared from the documentary research (2014)

A place in the warehouse, with all the necessary conditions for deployment of the in company store was made available to the winning company from the competition. From this point, it begins a process to monitor the day to day activities, through the OTIF performance indicator, which monitors the quality of delivery of goods and services, with the primary goal of

enhancing customer satisfaction (Oliveira and Araujo, 2009). This is necessary to identify possible discrepancies the delivery of wrong material, damaged materials or materials in a different amount and as a result,to support future actions if necessary.

Thus, the contractor ends up saving in reducing the amount of stock, but also in manpower, which will be the contracted with responsibility, including labor charges, among other.

RESULTS

The store showed good results and the inventory value was reduced in the follow-up period. It was possible to carry out an amount of around R$ 211,000 of the financial disbursement, only after the consumption made by areas. These savings were allocated to other company activities.

The level of service has also been improved, as the contractor remains responsible for this indicator, however, the third-part company is now responsible to fulfill an indicator that will be required by contract. If this is not achieved, it may even be discontinued, as serious problems may happen in times which the maintenance of the equipment is scheduled and surprisingly the materials wouldn't be available.

CONCLUSIONS

It can be concluded that the in company store system will bring cost savings to the company. It is extremely important to find alternatives to achieve competitiveness, when the global economy, mainly the Brazilian one, is going through some rough times.

This system shows how to pay the amount shown in Figure 2, only after consumption. That way, you can avoid having idle money in stock without having an outbound forecasting, and as a result, it may be allocated to other activities, as required by the company. Therefore, it is an interesting alternative to achieve important results.

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