THE IMPORTANCE OF STOCK MANAGEMENT IN AN AUTOMOTIVE RETAILER MICRO ENTERPRISE.

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SUMMARY

This article addressed the management of inventories in a retail micro-company in the auto parts sector, located in the city of Salvador das Missões, in the northwest of the state of Rio Grande do Sul. It presents the results of a case study that aimed to analyze the management inventories of the company Auto Elétrica Spohr, and argue about the importance of computerized control of their inventories, based on management concepts and information technology. The theoretical basis presents concepts of stock, stock management, stock functions and a computerized stock control system. The research method included a case study, exploratory and qualitative, using data collection techniques as bibliographic consultation, on-site observation and informal interview with the owner. As a result, training is suggested for employees to appropriate knowledge to operate the computerized inventory system existing in the company, and thus provide more efficient material control. The theoretical basis was presented, which deals with the importance of an efficient stock management.

KEY WORDS: Inventory Management. Control. Information systems.

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1. INTRODUCTION

Currently, competitiveness presents itself as the greatest challenge for all organizations. Regardless of its size, the company, in order to be competitive, must seek the best opportunities aimed at better customer service, thus seeking satisfactory results. One way to satisfy the customer is to serve them promptly, at the time and in the desired quantity. This is possible through an efficient stock management.

As the objective of every company is to maximize the return on invested capital, and in order for it to be achieved, one must work so that this capital does not remain inactive. The flow of materials represents one of the best financial costs of the company, however, if it is not well managed, the company can suffer several damages and financial risks.

Effective inventory management is a major challenge for companies that sell a wide variety of items, such as the auto parts sector, for example, which requires systematic inventory management.

The object of study of this article is Auto Elétrica Spohr, located in the city of Salvador das Missões - RS, which operates in the market since 2009, being founded by the current owner. It is a micro-company in the retail sales segment of auto parts and accessories in general, with numerous products available for sale, covering mainly parts for the electrical system of automobiles, motorcycles and agricultural machinery.

Despite operating in the market for seven years, the company's procedures in relation to material control are largely carried out manually. The company has a computerized system, but it is not used properly and effectively, as currently only the registration of products is registered.

Thus, the objective of this work is to analyze inventory management, present arguments that emphasize the importance of inventory control in the company, and that justify the investment in training personnel to operate the existing system effectively, or who knows, invest in a more complete and adequate system for the company's line of business.

2. METHODOLOGY

The procedures adopted for this study were the bibliographic survey and the case study. Case study, according to Gil (2010) is defined as follows:

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> "It consists in the deep and exhaustive study of one or a few objects, in a way that allows their broad and detailed knowledge, a task practically impossible through other designs already considered" (GIL, 2010, p. 37).

In data collection, the informal interview technique was used. Gil (2010), points out as the main limitations of the interview the provision of false answers, determined by conscious or unconscious reasons, and the influence of the interviewer's personal opinions on the interviewee's answers.

To avoid the influence mentioned by Gil (2010), an open questionnaire was used, informally, composed of easy-to-interpret questions, which were presented to the interviewee, the owner. The interview was conducted based on the topic under study, with the purpose of demonstrating how the company's stock control has been carried out, with the intention of achieving the objectives proposed by the present work.

3. THEORETICAL FOUNDATION

3.1. STOCKS

To avoid loss of sales due to lack of products, or if demand is not predictable, or due to the unavailability of products on the market, companies need inventories. According to Dias (2012, p.1), "inventories function as a necessary lubricant for production and for good sales service".

For Moreira (2004, p. 463), "stock is any quantity of physical goods that is conserved, in an unproductive way, for some time interval".

Chiavenato (2005, p. 67) mentions that, "stock is the composition of materials, materials in process, semi-finished materials, finished materials, which is not used at a certain time in the company, but which must exist in view of future needs" . In the specific case of the researched company, the type of stock is the finished product, that is, automotive parts.

The focus of the entire organization is the customer, so you cannot fail to serve them for lack of products. For this chain to work efficiently, it is necessary to maintain an effective control over the stock, which can be minimum, maximum or even zero, and it is up to each administration to plan and control its materials according to previously established objectives and goals.

Dias (2010), addressing materials management, clarifies that:

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> "The organization of a stock sector must set some objectives, such as: the number of
> items that must remain in stock; the periodicity that the stock must be replenished;
> the purchase quantity necessary to maintain the stock for a predetermined period;
> make the purchase request to the responsible sector; receiving, storing and storing
> materials according to needs; control stocks in terms of quantity and value; maintain
> periodic inventories to assess the quantity and condition of the stocked materials;
> identify and remove obsolete and damaged items from stock "(DIAS, 2010, p.21).

Still, for the author, to set up a stock control system, several particularities must be taken into account, such as the way they should be treated, their levels, the relationship between stock level and cinvested capital, among others.

3.2. STOCK MANAGEMENT

The management of materials is a very complex task, since it encompasses a sequence of operations that goes from the identification of the supplier, through the purchase of the good, its receipt, storage, production until the distribution of the finished product to the final consumer. The inventory manager is responsible for keeping the materials organized and cataloged in safe and easily accessible places. Figure 1 shows this sequence of operations:

Figure 1: Materials Management Cycle

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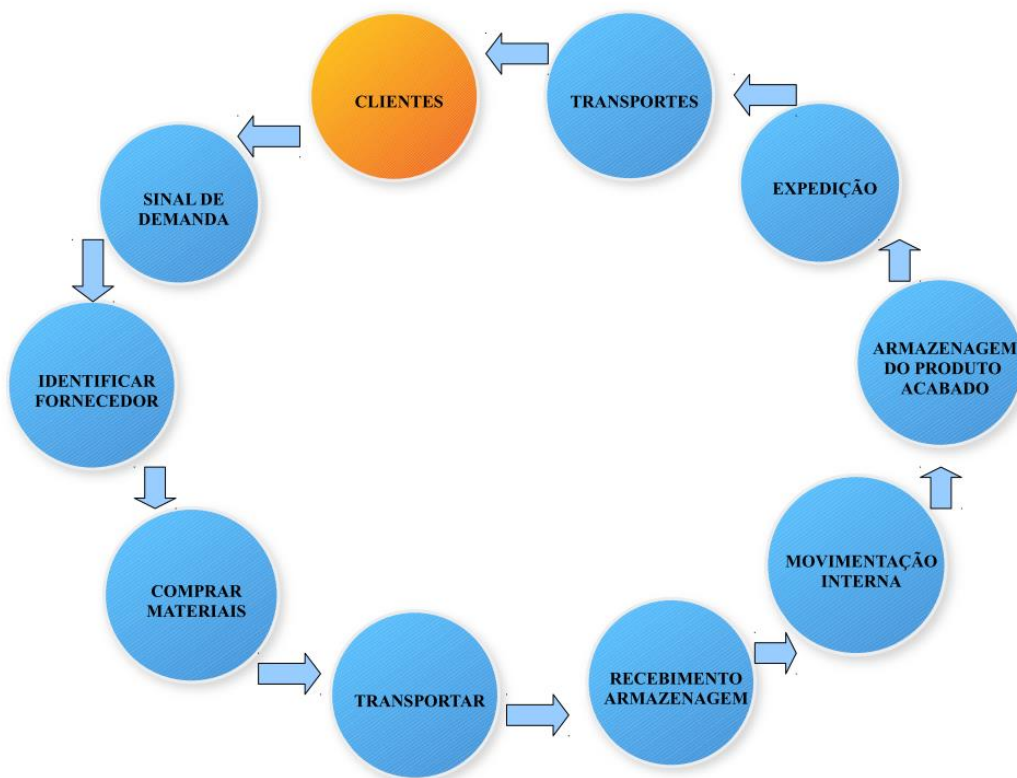
Source: Adapted from Martins PG et al. (2005)

According to Dias (2012), Inventory Management is defined as the planning and control of goods for a quick replenishment, from their entry to their departure. For this, the inventory manager must be aware of the following situations:

a) Growth or reduction of goods turnover;

b) Increase or decrease in obsolescence and in the costs of stocked products;

c) Variation in sales due to the stock of products that are really needed.

For Vendrame (2008), inventory management represents the act of managing idle resources that have economic value and that are destined to supply future material needs, within an organization. It is a series of actions that allows the administrator to check that the stocks are being well used, well stored, well handled and well controlled.

Have Moura (2004) concludes that the meaning of stock, as well as its administration, is much broader than we can imagine, going beyond storage and control. Inventory is what stimulates, correctly or not, the life of a company, and its perfect management is what enables the company to become competitive.

3.3 STOCK FUNCTIONS

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One of the main functions of the stock is to provide the company with the necessary resources for its end activity, be it production or simply marketing. In commercial companies, inventories are a link between the stages of the buying and selling process and, in industries, they represent a link between the stages of buying, processing and selling products.

In any of the situations mentioned, inventories play an important role in the company's operational flexibility. They act as buffers, as they minimize the effects of planning errors and unexpected fluctuations in supply and demand for products.

According to Amaral and Dourado (2011), the main functions of the stock are:

"A) To guarantee the supply of materials to the company, neutralizing the effects of: delay or delay in the supply of materials; supply seasonality; risks of difficulty in supply;
b) Provide economies of scale: through the purchase or production in economic lots; the flexibility of the production process; for speed and efficiency in meeting needs ". (AMARAL and DOURADO, 2011, p. 06).

Dias (2012) contextualizes that the missionof inventory management is to maximize the lubricating effect on sales feedback and adjust production planning, while minimizing capital invested in inventories, due to its high cost. Without stock it is impossible for a company to work, as it works as a buffer between the various stages of production until the final sale of the product. The same author explains that the final decision works as a balance, where the objective is to optimize investment, increasing the efficient use of financial means, minimizing the needs for capital invested in inventories.

There are situations in which conflicts are generated between the finance department and the sales department, regarding the availability of the product and the process to reduce the invested capital. Table 1 shows the interdepartmental conflicts regarding the stock.

Table 1: Interdepartmental conflicts over inventory

	Purchasing department	**Finance department**
Feedstock (High-stock)	Discount on quantities to be purchased	Invested capital Interest lost
	production department	**Finance department**
Feedstock (High-stock)	No risk of lack of material Large manufacturing batches	Higher risk of loss and obsolescence

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		Increased storage cost
	Sales department	**Finance department**
Finished product (High-stock)	Fast deliveries Good image, better sales	Invested capital Higher storage cost

Source: Days (2012)

Interpreting In Table 1, we can say that the financial department defends the practice of low stocks, with the purpose of reducing capital and storage expenses and to improve return rates, while the purchasing, production and sale departments defend high stocks, because they allow the practice of lower prices, greater room for maneuver and slack in production, reduce the risk of lack of material, provide large manufacturing batches, which promote the company's image, speeding up deliveries and improving sales.

Thus, Dias' (2012) guideline is that inventory management should better adjust the objectives for the four departments, without causing damage to the company's operations, as well as the inventory policy.

3.4. COMPUTERIZED SYSTEM FOR STOCK CONTROL

For Rezende and Abreu (2011, p. 40), "an Information System can be defined as a process of transforming data into information that is used in the company's decision-making structure and that provides administrative support, aiming at optimizing the expected results ".

According to Moreira (2004, p. 270), "a stock control system is a set of rules and procedures that allow you to answer questions of great importance, and make decisions about stocks". It should provide answers about when and how much to keep or purchase for each commodity, in addition to taking into account the seasonality of the products and following market trends more quickly and accurately. In the case studied, the seasonality factor must be taken into account, because in the summer months, the greatest demand is for articles related to air conditioning and cooling of vehicles, while in the winter months, parts related to electrical part of automobiles.

A computerized inventory system aims to main function to avoid the lack of products and also to reduce the expenses with large inventories, sometimes obsolete. In a microenterprise, like the one being studied, which sells a wide variety of items, this precision

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is unlikely to be achieved with manual management, due to the complexity of activities and the demand for time.

However, in order to have correct data, it is necessary to be careful about feeding the system. The movement of inventory items must be recorded in real time so that the physical values and their records in the system are as close as possible.

In the last decades, companies are increasingly leavings, the manual stock system, to adopt the computerized system. Ballou (2011, p.231) clarifies that this change has been showing great advantages in material management, among which we can highlight: easy adaptation to computers; agility in billing and collection; existence of programs (softwares) of easy access in the market, to attend the necessities; reduction in capital invested in inventory and, at the same time, improvement in the level of customer service; and, elaboration of more improved reports; among others.

Miranda (2007), also highlights some benefits obtained with the use of a computerized control system, mainly in retail, which is the branch of activity of the company under study. Among them, the following stand out: better control and holistic view of the operation; cost reduction; revenue and sales growth; agility in obtaininginformation; stock optimization; reduction of time and losses.

> "An information system is an integral part of the company and is a product of three components: technology, organization and people. You cannot understand or use information systems in companies efficiently without knowing their dimensions in terms of organization and people, as well as their technological dimensions ". (LAUDON AND LAUDON, 1999, p.5).

Miranda (2007, p.14) describes that, during the computerization process in the company, special attention is needed in the formation of the database, as it will serve as a guide for the manager's decision making. A well-designed product register, including the correlation of similarity information, for example, brings agility to the clerk when looking for the appropriate part and organization when ordering these products.

In view of the above, it is noted the extreme importance of inventory management for micro and small companies, especially for the Auto Elétrica Spohr, object of this study, which through the information system can improve the choice of its suppliers; simultaneously processing information about entries and exits; obtain the stock and sales position at any time;

generate reports that allow to draw up strategies for stock management, purchases and sales; among other advantages.

4. PRESENTATION AND DISCUSSION OF RESULTS

In this section, the data collected during the research process will be presented, as well as a discussion of the results obtained.

When Asked whether the company had a management information system for inventory control or whether it had some alternative way to control its materials, the answer obtained was that the company has a computerized system for the management of materials, however, it has not been operationalized effectively, so that they do not really have an effective control over the stock, stating that the main control is still done manually through periodic counting of the parts.

Analyzing the answer based on the theoretical framework, Adriana (2012, p.32) states that "inventory management is the lifeblood of any type of retail company. Not having a product available in stock and / or not being able to locate it in a timely manner to supply the consumer, can mean the loss of the sale or even the loss of the customer. When he doesn't find what he is looking for in the company, he is pushed to the competitor, with the risk of not returning ".

Regarding storage, it was observed that the location is appropriate for each type of merchandise. They are arranged on their own shelves and separated into large groups, being divided into parts for automobiles, motorcycles, trucks and agricultural machines. Figures 2, 3, 4 and 5 illustrate the Auto Electrical storage systemSpohr.

Figure 2: Storage of products at Auto Electrical Spohr

Source: Personal archive of the authors (2016)

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As noted, it was found that between the shelves there is an appropriate space so that employees can move easily, and thus avoid the fall of the pieces and consequent loss of material.

Figure 3: Storage of products at Auto Electrical Spohr

Source: Personal archive of the authors (2016)

Figure 4: Storage of products at Auto Electrical Spohr

Source: Personal archive of the authors (2016)

Figure 5: Storage of products at Auto Electrical Spohr

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Source: Personal archive of the authors (2016)

As observed in the images, in storage, the company still separates the products by types and brands, for example: car batteries are allocated in an appropriate location, separated by brand; lamps of the same type are arranged on their own shelves, and so on. Therefore, when a customer orders a product it is easily located by the attendant.

Asked if there was a loss of material in the company, the interviewee said that what happens is that some pieces are obsolete on the shelves for a long time. This happens due to the low demand in relation to that part or the poor control and replenishment of its stock. He also said that every time the attendant searches for a part on the shelf and verifies that this is the last one, he immediately notes its lack in a notebook, where all the missing items are described, to later place the order with the specific supplier. However, this system is not always reliable. A computerized inventory control system would make it possible to consult more accurate reports on which products are missing and thus avoid the accumulation of parts that are no longer used on the shelves.

According to BALLOU (1993), in recent decades companies have left the manual stock control system to adopt automated stocks. This change brought at least five major advantages in stock management: easy adaptation to computers; agility in the collection and billing sector; existence of programs to meet the needs of companies; reduction in capital invested in inventory and improvement in service level; improved reporting. Figure 6 shows an image of the system that was used by the company.

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Figure 6: System **Tecnobyte Sac Free**

Source: Auto Electrical Spohr Archive (2016)

As the systemTecnobyte Sac Free is free software, accessed for free, its resources are basic. After conducting this study, the company invested and acquired a new system. This is Dallcon Sistemas, which allows the issuance of electronic invoices, electronic coupons and access to more specific and complete reports.

The owner also stated that training will be made available to employees to make the existing system better operational, in order to learn how to exploit all the functions it provides, so that one can have a more effective control over stocks and avoid discrepancy in numbers. presented by the system and the number of pieces on the shelves.

FINAL CONSIDERATIONS

In today's globalized world, consumers are increasingly looking for quality products at a good price, and they also expect fast and efficient service. In order to provide this service desired by the client, managers must have, among other things, a good control of the materials. For this, there is an option to take advantage of the technology to assist in the execution of operational processes.

However, many companies still choose to carry out their activities without the aid of the resources that computerization offers. Some, because they believe it is a serviceexpensive,

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others for considering it too complex. The problem is that manual control takes a lot more time and is a lot more work. Faced with these obstacles, the manager sometimes fails to give due importance to the management of materials.

Thus, this study aimed to demonstrate the importance of inventory management in a companya, regardless of its size. We also tried to demonstrate the relevance of computerization to control these stocks, especially in companies that sell a wide variety of items.

The results of this work demonstrate that the ownerthat of the company studied was unaware of the real purpose and importance of effective inventory control. It was also found that the company had a computerized system, however it comes up against the lack of trained professionals to operate it in order to explore all its features.

On the other hand, the manager demonstrated an intention to seek training for employees and invest in technological resources in order to improve customer service and thus make the company increasingly competitive in the market in which it operates, so much so that at the end of this study, the system was replaced Tecnobyte Sac Free, free software, accessed free of charge, by the Dallcon Sistemas system, which allows the issuance of electronic invoices, electronic coupons and access to more specific and complete reports.

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