



## SUPPLY MANAGEMENT AND DISTRIBUTION SYSTEM FOR FINISHED PRODUCTS

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**ABSTRACT**

This article highlights the activities that guarantees the improvement of the process in the management of supply and distribution of finished products, with the specific objectives of identifying the activities that assist in the flow of the chain, as well as describe the flow to the distribution of the finished product, the methodology used for this purpose was based on bibliographic research. In order to achieve a competitive differential, companies are molded to the Toyota model of production that aims at eliminating all waste, controlling inventory management and optimizing company assets.

**KEYWORDS** : Internal Management, Material Distribution, Toyota System, Tool.

**INTRODUCTION**

Companies in the current competitive moment have been seeking quality improvements in their products and services, with the aim of highlighting the activities of the Supply Management System and Distribution of finished products. With the purpose of delineating the possibility of a process of management of supply and distribution of finished products in a timely manner, the study will be developed using the methodology through bibliographic research. To understand the problem it is important to highlight the current situation of the competitive market the use of tool, philosophy and system that provides improvements. The use of the kanban tool, the just-in-time philosophy and the MRP system, all based on the Toyota System.

In this article we will discuss the supply management and distribution system of finished products described through internal management, based on the distribution of the material focusing on inventory management, thus obtaining a competitive advantage.

**2 INTERN MANAGEMENT SYSTEM**

In order to have an efficient internal management process, DIAS (2005) clarifies that the control has as main objective to inform how the stock is positioned. With this, the internal management system has the facility to reduce the time of supply replenishment by improving the quality of the service and fulfillment of the delivery, finishing the process in the arrival of the finished product to the consumer.

**3 MATERIAL DISTRIBUTION**

As BOWERSOX (2009) analyzes the distribution with a quantitative approach in the materials as they are allocated in the stock. The design and the handling of the inventories are directly related to the characteristics of the products.

The distribution of continuous material is fundamental for any company, because as quality and price tend to match. The differential that will influence the final product is exactly in the distribution processes.

In order for this quality in the finished product arrive at the final customer, the manufacturing company needs to have a chain working with excellence, consolidating the inputs on the arrival of the raw material. According to DIAS (2005), a company has a raw material management structure with well defined policies and methods, with veracity in the inventory records so that all material movement can be recorded by the appropriate documents.

In CHOPRA and MEINDL (2003) they affirm that the stock has a relevant participation in the capacity of the supply chain for having the main objective the best outflow.

Establishing inventory levels and their positioning is a part of the inventory control mission, since it is necessary to balance the costs of maintaining it.

According to BOWERSOX (2009), inventory management is the integrated process where the company's policies and value chain are obeyed, approaching a philosophy in planning method. In order to succeed in the distribution and supply of inputs, there must be an interaction between the processes involved.

Emphasized by BERTAGLIA (2005), stock management is a branch of business administration that is related to the planning and control of materials or products that will be used to produce goods and services. This participation results in a management of supply and logistics distribution.

**4. TOYOTA MODEL**

The international benchmark in lean production is the Toyota automaker, where its system consists of four implicit rules that guide the design.

**Four rules as Martins (2005 p.461):**

All work must be highly specified in its content, sequence, time and outcome; All supplier client relationships (internal and external) must be direct, with a defined and clear channel for sending and receiving responses; Workflow and process should be simple and straightforward; Any improvement must be made by the scientific method, under the coordination of a supervisor, and at the lowest level of the organization.

According to Martins (2005), it is a philosophical concept because it has a very strong base in the acceptance of the idea by all the members of the factory, since people become the key to success.

**5. MRP (MATERIAL REQUIREMENTS PLANNING)**

Fernandes, Filho (2010) explains that the MRP system since the 70's has been implemented in large companies from what will be produced, will indicate which inputs or semi-finished products to buy, and what is the best time for such an acquisition.

The MRP identifies which items make up the manufacturing network, the time to be purchased and the quantity needed, based

on the time it takes to be produced, considering the lead time. Taking all these precepts into account, MRP reaches its main objectives, which is. Respect the master plan of production, With relevance in the market oscillation.

## 6. FILOSOFY AND TOOL

There are philosophies (JIT) and tool (KANBAM) that help in the internal management system so that there is a control in the productive process with quality and accuracy in the deadline of the finished product. Are defined:

### • **JUSTINTIME**

It is a production management philosophy that determines the exact time of what should be produced, transported or purchased. For Martins (2005) explain that Just in time produces after being sued, ie, the product is first sold and then the items will be bought and soon modified to a finished product. Through this philosophy, the raw material reaches the place of use, that is, the production process at the exact moment of its production.

### • **KANBAN (Pulled system)**

Kanban uses cards with the purpose of authorizing the progress of the process and the movement of inputs in the production chain (Corrêa and GIANESI, 2008). The use of this tool is very simple, with cards that function as "production orders" or as permanent "purchase orders".

## 6. SUPPLY CHAIN

The supply chain management covers all the movement and storage of inputs. Works in process of inventory and finished goods from the point of origin to the point of consumption.

According to Moura (2002), the main purpose of the supply chain is to offer better levels of customer service, by reducing the time of replenishment by the availability of the inputs closest to the production process, contributing to the reduction of the total costs of logistics.

For SLACK (2009), the chain needs to achieve adequate levels of performance of the operation called by the following four variables: Quality of a product or service, Fast time between ordering and delivery of the product to the consumer. Reliability delivery with punctuality, Flexibility ability to handle changes ensuring consumer need.

## 8. CONCLUSION

In view of the above, it is understood the relevance of the updating of the companies regarding the activities that help a system of management of supplies and distribution of finished products. We identified the Toyota Model as a waste eliminator in the manufacturing area, production through small lots became indicators to meet the needs of consumers. In order to serve the market, the Toyota model is linked to the Just in Time philosophy that facilitates the arrival of items in the production chain, companies adopt the kanban tool, which in turn immediately requests the inputs to supply the process. All activities contribute to efficient supply management and distribution of finished products. MRP, a system that indicates which inputs or semi-finished products should be purchased, and what is the best time for such an acquisition.

In addition to optimizing the company's assets, focusing on consumer satisfaction by receiving your finished product in real time and with quality. Consolidating your image in the market and exceeding customer expectations.

## REFERENCES

1. BERTAGLIA, Paulo Roberto. Logística e Gerenciamento da Cadeia de Abastecimento. São Paulo: Saraiva 2005.
2. BOWERSOX, Donald J. Logística Empresarial: O Processo de Integração da Cadeia de Suprimento. 1. Ed – 7. Reimpr. São Paulo: Atlas, 2009.
3. CHOPRA, S. e MEINDL, P. Gerenciamento da cadeia de suprimentos. São Paulo: Prentice Hall, 2003.

4. CORRÊA, H. L.; GIANESI, I. G. N.; CAON, M. Planejamento, Programação e Controle de Produção. 5. Ed. São Paulo: Atlas, 2008.
5. DIAS, Marcos Aurélio P. Administração de Materiais: princípios, conceitos e gestão. 5. Ed. São Paulo: Atlas, 2005.
6. FERNANDES, F. C. F; GODINHO FILHO, M. Planejamento e Controle da Produção dos Fundamentos ao Essencial. 1. Ed., São Paulo: Atlas, 2010.
7. MARTINS, Petrônio Garcia. Administração da Produção. 2. Ed. São Paulo: Saraiva 2005.
8. MOURA, R. A. Administração de Armazéns. Instituto IMAM. 2002.
9. SLACK, Nigel. Administração da Produção. 3 ed. São Paulo: Atlas, 2009.