Purchase Management Improvement in a TV Company from the Industry District of Manaus (PIM)

# PURCHASE MANAGEMENT IMPROVEMENT IN A TV COMPANY FROM THE INDUSTRY DISTRICT OF MANAUS (PIM)

L. Kapisch<sup>1</sup>, A. Araújo<sup>2</sup>, M. L. R. Varela<sup>3</sup>, J. Machado<sup>4</sup>, <sup>1</sup>Department of Production and Systems, Azurém Campus, 4800-058 Guimarães, Portugal, <u>Id4571@alunos.uminho.pt</u> <sup>2</sup>Department of Production and Systems, University of Minho, Azurém Campus, 4800-058 Guimarães, Portugal, <u>dricafaraujo@hotmail.com</u> <sup>3</sup>Department of Production and Systems, University of Minho, Azurém Campus, 4800-058 Guimarães, Portugal, <u>leonide@dps.uminho.pt</u>

<sup>4</sup>Mechanical Engineering Department, University of Minho, Campus of Azurém, 4800-058 Guimarães, Portugal jmachado@dem.uminho.pt

Abstract – Continuous improvement in quality of products and processes offered by an organization can support companies keep it long in this competitive and dynamic business environment. Therefore, the interaction between the university, government, and Industry (the triple helix) is the opportunity for a Technology Company as TV's industry to have innovation and new studies developed frequently. This research, studies the improvements of material purchases process to increase knowledge in the TV Purchasing Department inside an Industry from the Industrial District of Manaus, Brazil (PIM) which deals with high technology on their products and must have agility to be the first option to the customers. During the research a checklist was applied to employees from purchasing department and was observed that there was a frequent participation from quality sector in the resolution of the procurement process and that has proven to be positive in the management process. These are facilitators on a daily developers, customers and suppliers.

Keywords: Improvement, Quality, Purchasing department, Academia-Industry cooperation.

#### 1. Introduction

The purchase function is an essential segment of material and suppliers department which are intend to meet the needs of materials or services of an organization. So it should be planned quantitatively and meet them at the right time with the right amount. Check the acquired products are properly delivered and provide progress at your destination. The activity of the purchase department has been seeing as successful today as an activity of strategic importance [10].

It is known that an effective way of obtaining advantage in this competition is through the management of the supply chain, which covers this paper, planning, management and coordination of the flow of materials and information from the supplier to the end consumer. This seeks the integration of human and physical resources that enable the achievement of the ultimate goal of customer satisfaction with on-time delivery and quality.

Another way to see the purchasing area is when the organization has in its purchasing area a team that helps the company achieve its objectives by contributing to the optimization of its results, with return on assets and the generation of information and the competitive position and a good management strategy, as well as other conditions required for the great progress of the sector [10].

This paper is organized as follows: section 2 presents a brief literature review about the main subject underlying this work, section 3 summarized a description of the problem analysed in this paper, section 4 presents de proposed approach and resumes the main results obtained, and finally, section 5 puts forward the main conclusions and planned future work.

#### 2. Literature Review

In the purchase department is to be quantitatively planned the necessary materials and satisfy you at the right time and in the correct amount, and be properly delivered, making each of them has the right destination, that is inside the outside application, or for more or less to [8]. It is the correct process to achieve the Company's goals. Its mission is to understand the needs of competitive products and services, making it responsible for delivering on time, cost, quality and other elements in operations strategy [7].

In fact the purchasing management will cover the industry needs with its outside elements in order to maximize investment. This investment aims, in the short term and compatible with the contribution of purchases, a harmony with the rest of the departments as a way to achieve the Industry's goals and improve its economic position in the market.

The purchase management or to purchase actually is an operation from material area that is very important in the supply chain. This department makes the company can produce continuously and does not delaying the production line once they have the raw material and supplies, the production finalization will be saved.

Therefore, the procurement management is a fundamental tool for the Company's performance and must be analyzed, studied and strategically modified according to the marketing needs.

## 3. Problem Description

The Company The company has several issues that purchase department needs to control. The main gap for the purchase department is the material management in excess and obsolete. The over stock - is the quantity of items in stock, new or reconditioned, obsolete or useless that must be eliminated, this material is dead stock, often causing damage to the company, or occupying the space for new materials [1].

However, control materials inventory in order to avoid lack of material without this approach results in excessive stock to the real needs of the organization that has excess material or obsolete [1]. The main cause for waste of stock, excessive materials purchase or obsolete materials in the organization is often due to lack of planning, lack of knowledge on purchase department with respect to actual consumption or utilization rate of a given unchecked resource [2].

The main characteristic of purchase sector performance is the use of financial and non-financial indicators due to the new context in which organizations are inserted where the intangible aspects outweigh the tangible aspects of organizations [3].

The purchase department can greatly improve the company's conditions within their field of work. Through the commercial and technical conditions acquired during their work plans to support the activities of this sector and that meets the company of compromising, generating the organization's growth [9].

It is important to understand that the purchase department is not only a mere sector. The company which generates indirect and direct profits the ability to contribute making the organization is able to remain competitive in the market through good negotiation and improvement of its products and or services.

For a good purchase management there must be an interaction, coordination and communication among the departments inside the organization. It cannot isolated occur. The acquisition of raw materials, materials and components is a decisive factor in the activity of a company because depending on how it is conducted it can generate cost reductions and profit significant improvements.

In purchase management process the purchase department needs to interact with other sectors of the

company and the good interaction facilitates the streamlining of the problems and the search for solutions.

This Flowchart is part of the purchase department routine and it helps the buyers to keep the company rules.

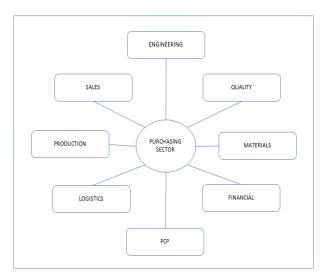


Figure 1: Purchasing Sector Interaction

While the suppliers' selection, for each purchase process an expense or commitment of corporate funds. This purchase sets in motion a series of accounting operations. The relationship between procurement and accounting is therefore vitally important and often started before the purchase is actually performed [9]

From a functional point of view, the desired effect of calling this close collaboration is to extend responsibility for materials as well as in the selection of suppliers, from the time of perceived the needs to acquire of delivery time and use [4].

In this figure 1 is possible to identify different areas, however the Quality department usually helps the purchase department during the developing of new supplies and it is responsible to assure the materials' quality. The company is responsible to proceed with the quality control during the productive process, for the purchase sector the Quality department is considerable by the purchase management as positive.

The purchasing department plays a key role in achieving the company's goals. Its mission is to understand the needs of competitive products and services, making it responsible for delivering on time, cost, quality and other elements in operations strategy [7].

The purchasing process is a group of activities in a logical sequence in order to produce a material or service that has a value to a specific group of customers. Thus, speed up the procedures effectively by following certain standards for what is intended, either in service to users, whether in performing tasks [5]. "Process is the specific ordering of work activities, in time and space, inputs and outputs clearly identified: a framework for action" [11].

### 4. Proposed Approach and Results

During this research which has as main study the purchasing sector an Industry from Manaus Industrial site (PIM) a checklist instrument containing ten (10) objectives questions fielded on 4 possible answers was applied to nine employees.

In the graph below is possible to check that most of them have blue colour and agree with the questions of the questionnaire. People that partially agree are in green colour, for red colour is people who disagree with the question, for purple colour there is no information once that there is no employee who was indifferent or did not answer.

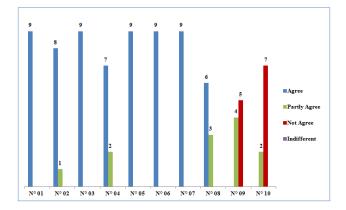


Figure 2: Results of the questionnaire

Through this study was analyzed which supply difficulties and improve the purchasing department of this company in addition to locally provide products and also serves other customers in other areas of the country. However, to offer more quality products the company expects to have its products desired and more sought after by others and so the company can continues to grow and remain in the market.

Therefore, the purchasing department of an Electronic Industry nowadays is facing high competition and the big dynamism that requires employees the best bargaining power and vision of the company as a whole, in order to reduce costs the purchase of materials, given the logistical and production process as well as its storage and distribution. That is, the buyer needs to be aware of everything that impacts the end result: Sales and Profitability of the company. The purchase department is looking for the successful organization today as a important strategic activity [10].

The company unfortunately is placed in an area which has hard logistics problems since Amazon state do not have a very good geographical location for the logistics transportation because of the main access is through of the rivers.

According to the company Engineering and Paving from Brazil, it is customary to say that the major problem of the companies located in the Amazon region is logistics, specifically infrastructure and transport, which in addition to jam the economic development of the region remain a obstacle to the work of entrepreneurs and the industry itself, the time to import and export their products [6].

Moreover, there is too much bureaucracy in the release process at Customs, which is slow compared to other countries and it strongly affect the company's procurement process. For imported material, since the input being the ship in the port of the city, this will still take 3-10 days to be released and for the air mode from 2 to 5 days, with normal periods (no strikes or holidays).

Therefore, the purchasing department needs to maintain a safety stock for imported inputs that are related to cargo clearance process. Boosting the purchasing department to obtain material in advance, resulting in high storage material, which may become excessive or even an obsolete material, or even risk to be a future scrap for the company.

The purchasing sector is also facing difficulties regarding the accuracy of material stock, often the system does not match the actual amount found in stock, causing losses to the company, such as line down during the productive process.

It is important to note that the purchasing department of this company in addition to locally provide products also serves other customers in other regions of the country, however, to offer more quality products the company expects to have their products even more desired and sought by others and so that the company can continue to grow and remain in the market.

The company under investigation has bottlenecks to be improved, and the purchasing department should be well automated by the new type systems: Material Requirements Planning (MRP), Operating Structure and Parameter (ERP), Management System Warehouses (WMS) System Just in Time (JIT) and Optimized Production Technology (OPT). In other words, it is expected that through these new systems the company can actually grow and have a market differentiator.

A study must be conducted with the products exceeded to be sold at a lower cost in points of specialized sales, avoiding scrap. In order to improve the material procurement process used in TVs manufacturing, is expected to get a better result and greater competitive potential. It follows also that the constant monitoring of the quality of the sector at all stages of the purchase management process is a positive thing for the improvement of the materials used in the manufacture of televisions in this company.

Finally maintain accurate inventory level and with the minimum of obsolescence in stock since this is money stopped, generating prejudice to the company.

## 5. Conclusion and Future Work

The difficulties are presented during all purchase process that requires investments from the company which is to have a very good team that understand all circumstances and have proactive actions to avoid problem and save Company's money.

Through the survey the company demonstrated interest to improve the procurement process of the

materials used in the manufacture of televisions and has enhanced and improved the purchasing department daily.

Currently the purchase department is recognized as a set of business strategies that contribute to the success of the organization. The purchase department creates these strategies, aimed a better management of the organization, working effectively with interaction, coordination and communication, so that is verified the achievement of organizational goals between several sectors.

The quality department has been noted as positive to the purchase sector since it is been important to achieve the company objective and quality performance.

During the development of the survey was observed that the participants were happy to answer the questionnaire and participate in the research and noticed the change in the industry, seeking new ways of improvement brought to the organization's process. Mainly to the purchasing sector was motivated to seek new and creative methods for troubleshooting and promote self-knowledge between employees and management of the company.

This research shows the improvement of procurement processes of materials used in the manufacture of televisions. And how is important to the company to understand the purchasing department since it is a strategic part of the company that must be updated.

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