

Universidad de Lima
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INCREASING THE LEVEL OF SERVICE THROUGH THE IMPLEMENTATION OF 5S AND MRP TOOLS IN SMEs MARKETING PHARMACEUTICAL PRODUCTS: AN EMPIRICAL INVESTIGATION IN PERU

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Angela Victoria Rodriguez Quispe

Código 20151176

Bressia Karen Salvatierra Hoyos

Código 20143210

Asesor

Juan Carlos Quiroz Flores

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Increasing the level of service through the implementation of 5S and MRP tools in SMEs marketing pharmaceutical products: An empirical investigation in Peru

Angela Victoria Rodriguez-Quispe, Bressia Karen Salvatierra-Hoyos, Martin Fidel Collao-Diaz and Juan Carlos Quiroz-Flores

Faculty of Engineering and Architecture, University of Lima, Lima, Peru

20151176@aloe.ulima.edu.pe, 20143210@aloe.ulima.edu.pe, mcollao@ulima.edu.pe,
jcquiroz@ulima.edu.pe

Abstract

Nowadays, Peruvian SMEs, with an initial business model, seek and achieve good acceptance in the market, which are obliged to acquire the necessary knowledge and tools to be able to continue and manage a great change in the growth of the company. In this context, the research aims to implement the tools of industrial engineering in order to achieve the improvement in the level of service in a pharmaceutical SME.

It was decided to perform an external analysis of the company to know the situation in which it is compared to others in the same sector and an internal analysis to determine its strengths and weaknesses.

To identify the problem, a deeper analysis of the process will be carried out using the root-cause tree methodology, in which it is concluded that, due to poor management in the warehouse, there are delays in the attention of orders.

For the implementation of the improvement, constructivism has been chosen as the theoretical framework, this choice is made with the purpose of knowing in depth the different theories that allow corroborating the benefits that the implementation of the different tools to be investigated have brought to the companies.

In this case, the normative networks are studied in two ways, 5S and MRP tools. The methodology used for this purpose is based on a quantitative-descriptive analysis, which frames the registration, analysis and interpretation of an audit and checklist, as well as the times or processes of the phenomena that occur within the company.

Finally, after implementing the 5S and MRP tools, the technical validations are carried out through audits and the Arena Simulation Software, respectively.

Keywords

Service level, pharmaceutical sector, Lean manufacturing, 5S, MRP

1. Introduction

The pharmaceutical sector in Peru presents a growth between 2 to 3% (Terranova, 2022), since, during the pandemic, the demand for the pharmaceutical portfolio is growing and therefore the sales of the sector were high. That is why this study focuses on a marketing company belonging to the pharmaceutical sector that decides to start its business model, and the good management of this, achieves a good acceptance in the market, which achieves high growth due to its large customer acquisition, but today, entrepreneurial companies do not have the knowledge or tools necessary to continue and manage a large change in growth, as well as not having established specific indicators to retain customers.

Therefore, this case study aims to increase the efficiency of the level of service, because although it is true that the company had good growth, on the other hand, presented a low percentage of the level of service provided to the customer, since it did not meet the 3 pillars: quantity, quality, and time. Today, "the quality-of-service influences 60% of the decision to purchase a product" since it is part of the points that buyers evaluate ("Quality of service influences 60% of the purchase decision of Limeños", 2019).

That is why it is important to apply the tools of Industrial Engineering to improve the level of service of the company, since the problem is directly related to the fact that there are delays in the location of products in the warehouse for

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