

## Analysis of the Production Time in a Pharmaceutical Company

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**Abstract :** Pharmaceutical companies are facing competition. Indeed, the price differences between competing products can be such that it becomes difficult to compensate them by differences in value added. The conditions of competition are no longer homogeneous for the players involved. The price of a product is a given that puts a company and its customer face to face. However, price fixing obliges the company to consider internal factors relating to production costs and external factors such as customer attitudes, the existence of regulations and the structure of the market on which the firm evolved. In setting the selling price, the company must first take into account internal factors relating to its costs: costs of production fall into two categories, fixed costs and variable costs that depend on the quantities produced. The company cannot consider selling below what it costs the product. It, therefore, calculates the unit cost of production to which it adds the unit cost of distribution, enabling it to know the unit cost of production of the product. The company adds its margin and thus determines its selling price. The margin is used to remunerate the capital providers and to finance the activity of the company and its investments. Production costs are related to the quantities produced: large-scale production generally reduces the unit cost of production, which is an asset for companies with mass production markets. This shows that small and medium-sized companies with limited market segments need to make greater efforts to ensure their profit margins. As a result, and faced with high and low market prices for raw materials and increasing staff costs, the company must seek to optimize its production time in order to reduce loads and eliminate waste. Then, the customer pays only value added. Thus, and based on this principle we decided to create a project that deals with the problem of waste in our company, and having as objectives the reduction of production costs and improvement of performance indicators. This paper presents the implementation of the Value Stream Mapping (VSM) project in a pharmaceutical company. It is structured as follows: 1) determination of the family of products, 2) drawing of the current state, 3) drawing of the future state, 4) action plan and implementation.

**Keywords :** VSM, waste, production time, kaizen, cartography, improvement

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