

Production optimisation canvasses

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The topic of the assignment: Optimisation of the production line of canvasses and set up short and long term goals to increase the efficiency.

Introduction

A company that produces canvasses has a hard time competing in the market. The cost price is too high, which is mainly caused by the production costs. The objective of this research was to enhance the efficiency of the production line of canvasses within this company. The company produces canvasses since 2015. They are able to deliver all kinds of canvasses, which leads to the need of a flexible production line. It also makes it harder to create an efficient process.

Method

To get to the objective of this research a research question has been formulated:

“How can the efficiency of the production line of canvasses within Siemerink be improved?”

The sub questions that help answering the research question are:

1. Which risks and improvement options are currently present in the process?
2. What are the short- and long-term goals?

To answer these questions, an analysis was performed. Which gave insights about the process, the production time, the stock, the sales etc. From this analysis the risks, requirements and points of improvement are concluded. The points of improvement are used to formulate the long- and short-term goals. Three of these goals are described in detail. Following up on these goals, there is a chapter about the implementation of the goals. The structure is shown in figure 1.

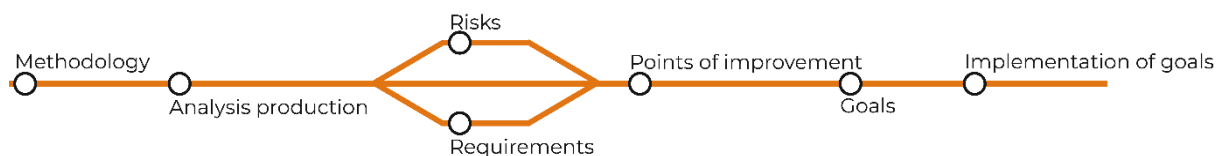


Figure 1: Structure research

Result

The first part of the result of this research is a broad analysis of the production line of the company. This analysis gave insight about all the steps within the process. Next to this, it also described components like inventory control, planning and orders. From this analysis, combined with a list of requirements and a risk analysis, points of improvement was made. The long- and short term goals were formulated from these points. Figure 2 gives an overview of all goals and when to implement them. Three goals were described further into detail:

1. Layout factory hall
 - a. The route of the product is improved by 66% by changing the layout of the factory hall.
2. Inventory control
 - a. More detailed insight has been generated in this part of the research about inventory control and how it would work for this company. Several suggestions are made.
3. Production speed
 - a. There has, same as the previous point, been more insight into the bottleneck of the production process and how the company could improve this.



Conclusion

With this research, a start has been made with enhancing the efficiency of the production of canvasses. The research questions and sub questions have been answered. Since the company only produces the canvasses for three years and the process has changed multiple times within those years, some data was not available or reliable enough. The company should start collecting useful and reliable data and continue with the implementation of the goals. Next to that, they should analyse the data and compose more long- and short term goals.