

# **IMPROVING SUPPLY CHAIN PERFORMANCE USING SALES AND OPERATIONS PLANNING: A CASE STUDY IN A LEATHER COMPANY**

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**Operations in a supply chain network are not always in a steady state. As market changing rapidly, this condition creates more uncertainties to the company. It increases demand's variation, shorter product life cycle, and shorter lead-times expectancy from the customers. Higher market flexibility, limited number of suppliers and source of materials could also add more complexity and affect supply chain performance.**

This research is a case study in a leather company with a complex situation. The authors aim to find actual problem in the company by identifying any possible causes of supply chain disruptions. The study also investigated the current implementation of sales and operations planning in the company. The ultimate purpose is to improve the supply chain performance.

By the time the research was conducted, the company found difficulties to optimize their supply chain performance because of disruptions. The company was producing wet blue, semi-finished leather made from animal skin. It supplied mainly to the fashion industry with higher demand uncertainty. Some inefficiency measures were sometimes taken by the company to fulfill the customers' order. As a result, the company suffers from high total cost of supply chain. However, demand uncertainty was not the only factors that triggers problem in the wet blue supply chain, forecast bias also contributes to the current problem.

Multiple data collection methods are conducted during the study such as observations,

interviews, questionnaires and document investigations. Collected data then being analyzed to find the actual problem in the company's supply chain network and to assess their sales and operations planning maturity. The first aim of the study is to find the actual supply chain problem. The imbalance between supply and demand was identified as the actual problem in the wet blue supply chain. Two external causes and five internal causes related to silo mentality were identified from the Ishikawa diagram. In this study, authors proposed a set of recommendation such as a prioritization matrix that can be implemented by the company to address the causes based on their significance and effort.

The second purpose of the study is to improve the supply chain performance based on the sales and operations planning. First, sales and operations planning in the company was measured. However, there is a gap between the results and the actual conditions based on the data analysis. Thus, the authors recommend initial steps to eliminate those gaps and unify the company's perspective about their actual state of sales and operations planning. In addition, a time-based recommendation to improve sales and operations planning was proposed. A consolidation framework was developed to see the relationship between cause-effect analysis and the sales and operations planning process assessments. It has been seen in this study that by solving the causes in supply chain disruptions has a direct impact in improving sales and operations planning performance.