## How to integrate Purchasing into the Sales and Operations Planning Process

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Sales and Operations Planning, S&OP, is a collaborative business management process where the goal is to balance supply and demand on an aggregated level. S&OP has, during the last decades, increased in popularity, and many Swedish companies, including Alfa Laval, have implemented the business process. To achieve a more mature S&OP process, purchasing should be incorporated in the S&OP collaboration. This is not a common topic in today's literature, hence, a case study with the purpose of defining processes on how to integrate purchasing in the S&OP process was performed at Alfa Laval. The case study resulted in two processes, visualized in figure 1.

Sales and Operations Planning. Implementation of Sales and Operations Planning increases the cross-functional collaboration throughout the company. In order to balance the demand and supply, a comprehensive review of the supply situation has to be conducted. Currently, at Alfa Laval, similar to many other companies, purchasing is not yet integrated and the supply capacity review consists of the production capacity only. However, to achieve a more mature process with a full supply review, the supplier capacity should be reviewed as well. During the case study, conducted at the business unit Gasketed Plate Heat Exchangers at Alfa Laval Lund, two processes have been defined to solve this issue. The goal with the processes is to understand the supplier capacity and to identify gaps between the supplier capacity and the demand plan.

**Defining the processes.** To understand the supplier capacity and to receive a comprehensive review of the supply situation, two processes were developed. The first process is the Sourcing Capacity Process, where the purpose is to define the supplier capacity. The first step of the process is to identify strategic component groups. Then, the sourcing situation will be evaluated and potential constraints defined by analyzing these strategic component groups on an aggregated level. The output from the process is data, defining the scalability for each strategic component group, together with a framework visualizing how the demand should be broken down to match the level of detail in the supplier capacity analysis. The sourcing capacity process gathers data from the purchasing function and is conducted as a parallel process to the current S&OP process. The output is data used to review the supply situation.

The second process, the *Monthly Supplier Capacity Check*, will identify gaps by comparing the supplier capacity to the demand plan. This comparison is conducted by using the framework for demand break down, together with the sup-

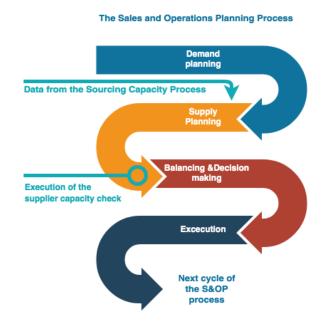


Fig. 1. Connecting purchasing to the Sales and Operations Planning Process

plier capacity analysis from the sourcing capacity process. The monthly supplier capacity check is performed during the local supply review meeting in the current S&OP process.

Benefits when integrating Purchasing. The main benefit when integrating purchasing in the S&OP process is improved communication, both internally and externally. By incorporating another department in the Sales and Operation Planning, the cross-functional collaboration will increase additionally. With increased communication internally, the purchasing function will together with the planning function be able to generate more accurate supply forecasts based on both the sales forecasts as well as historical data. Through the suggested processes, the level of detail of the forecasts will be customized depending on the component group and the time horizon. By adapting the level of detail depending on the time horizon, the forecast accuracy will improve additionally. With improved forecasts, customized for each component group, the communication with the suppliers will improve. Improved forecast accuracy will also lead to higher deliveries on time and decreased inventory.

**Further reading.** If you find the topic interesting and would like to receive a deeper understanding of Sales and Operations planning connected to purchasing, please read the full report on which this article is based on.