



ABSTRACT

AGGREGATE PLANNING AND S&OP STRATEGY TO IMPROVE SALES AND PROFITABILITY (CASE STUDY AT PT XYZ)

Raezita Dinar Nareswari

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This research is based on the case study at PT XYZ, one of elevator and escalator companies in Indonesia. As Covid-19 outbreak has been prolonged and impacting financial results of all companies over the world including PT XYZ, the organization was forced to come into the decision to account for sales declines from the past years even worsen lost revenue during the pandemic by restructuring the organization through workforce sizing or layoffs. It is found that there are more than 60 operative headcounts whose contracts were terminated (including installers, supervisors, and project managers). With the current limited resources after reorganization and limited budget for investments as the constraints while PT XYZ are forced to keep competing in the market and should upscale the order, it raises serious questions how the management team at PT XYZ can find strategical plans to still fulfill the customers' demand. Therefore, by the help of demand forecasting and aggregate planning in this research, PT XYZ can select which time series forecasting methods (Simple Moving Average, Weighted Moving Average, and Exponential Smoothing) should be applied with minimum error percentage and which strategy (Level Strategy, Chase Strategy, or Hybrid Strategy) should be implemented considering all the total cost will be spent for executing the strategy. Aggregate planning is thoroughly analyzed in this research by understanding first the demand estimation for year 2022 then it is formulated to find how much optimum numbers needed to find the lowest costs between the strategies.

Keywords: Operations Management, Demand forecasting, Aggregate Planning, Sales and Operations Planning, Linear Programming