Simulation to Improve the Performance of a Real World Warehouse in India

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Abstract

In India, the distribution of warehousing strategies was tax oriented which resulted in underutilization of available resources. With the implementation of the recent uniform and easy to implement Goods and Services Tax (GST) policy by the government of India, the country has been transformed into an integrated market. Due to this, now the companies are reducing the number of warehouses by consolidating their supply chain operations by leasing bigger warehouses which might locate at a central location to serve multiple states. The larger warehouses accommodate more varieties of orders that needed to be shipped across numerous locations. Storage of this inventories and its correct functioning has a significant effect in achieving a higher level of customer satisfaction. The warehouse space utilization and method/speed of order picking is one of the most important areas in warehouses operations that leads to cost reduction. This study uses Flexsim Simulation software to optimize the transport distances of order picking processes in a warehouse located at southern part of India.

Keywords
Warehouse; order picking; optimize; Flexsim; simulation

Biographies

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