

## Improving Sales through Inventory Reduction: A Retail Chain Case Study

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**Abstract :** Today's challenging business environment, with unpredictable demand and volatility, requires a supply chain strategy that handles uncertainty and risks in the right way. Even though inventory models have been previously explored, this paper seeks to apply these concepts on a practical situation. This study involves the inventory replenishment problem, applying techniques that are mainly based on mathematical assumptions and modeling. The primary goal is to improve the retailer's supply chain processes taking store differences when setting the various target stock levels. Through inventory review policy, picking piece implementation and minimum exposure definition, we were able not only to promote the inventory reduction as well as improve sales results. The inventory management theory from literature review was then tested on a single case study regarding a particular department in one of the largest Latam retail chains.

**Keywords :** inventory, distribution, retail, risk, safety stock, sales, uncertainty

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