

Abstract

“Safety stock optimisation”

Area

Logistics, warehouse logistics

Keywords

Warehouse logistics, process management, value management, value chain, safety stock, resource optimisation, capital tie-up, liquidity, space optimisation

Study/project

Project, part of the “Retail Management Projects” module

Starting point/project assignment/objective

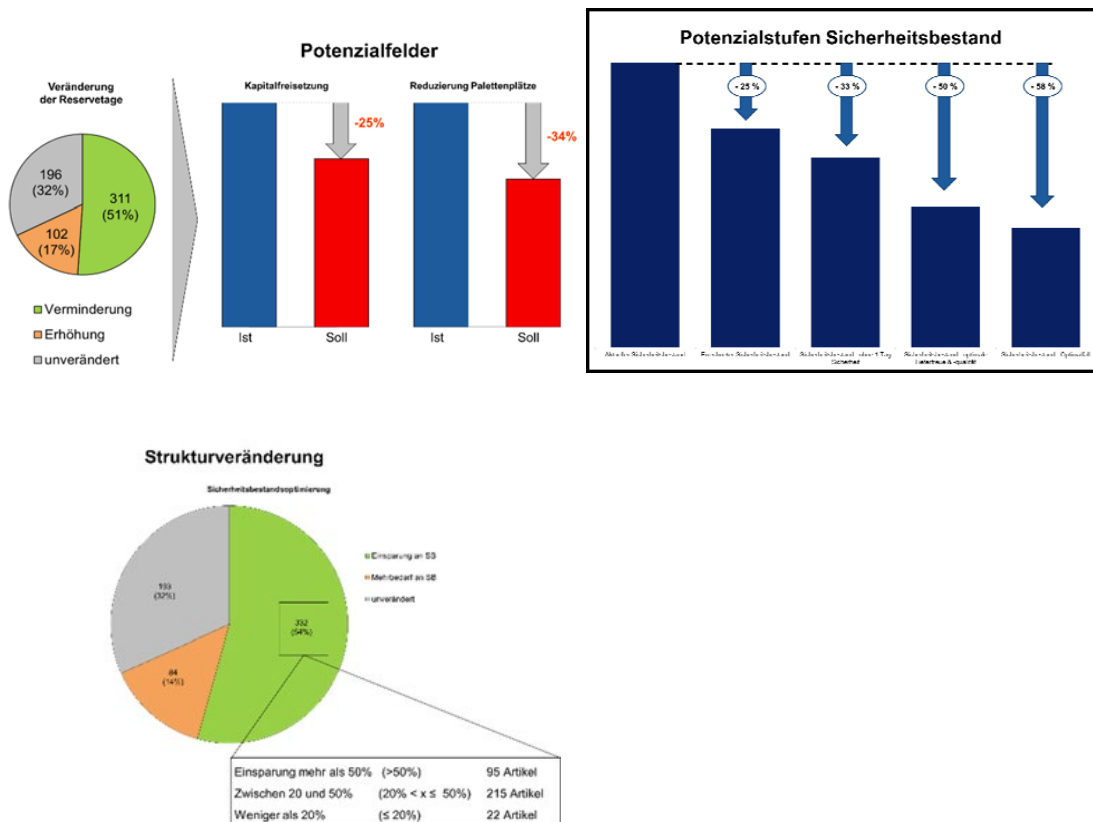
Safety stock helps ensure product availability at the POS when “issues” arise. Frequently, there is much more safety stock than required in some cases. This therefore represents a considerable cost factor, without a corresponding benefit for the retailer.

Product-by-product recording of safety stock, related to a defined product group and taking product seasonality into account, was the starting point for the calculations. These had to be compared with sales figures/fluctuations in order to determine a mathematically optimal safety stock on a product-by-product basis relating to “normal demand” taking into consideration the minimum purchase quantities and delivery performance of the respective suppliers. The values determined had to be compared with the actual values and the monetary potential arising from changing the level of safety stock had to be illustrated.

Procedure

- Product-by-product analysis of the safety stock (incoming goods, stock)
- Analysis of supplier performance (time and quantity)
- Analysis of outgoing goods
- Consideration of in-house process times
- Consideration of seasonal fluctuations as well as new listings and delistings
- Creation of a suitable calculation basis
- Stock calculation and reported results
- Derivation of recommended actions

Results/findings



Contact:

Prof. Dr. Stefan Rock

+49 (0)841 9348 7370

stefan.rock@thi.de