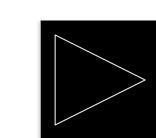


Advisor: Tugba Efendigil

Sponsor: Ahold-Delhaize

The Right Inventory at the Right Time





January 2018 Poster Session

Motivation

Weekly promotions led by a high-low pricing strategy require strategic safety stock investments to ensure inventory levels are adequately controlled.



Hypothesis

Dynamic, multi-criteria, item segmentation will allow high-low retailers to set cycle service levels that meet changing business needs.

Multi-Criteria Item Segmentation Dynamic Cycle Service Levels Reduced inventory and stockouts

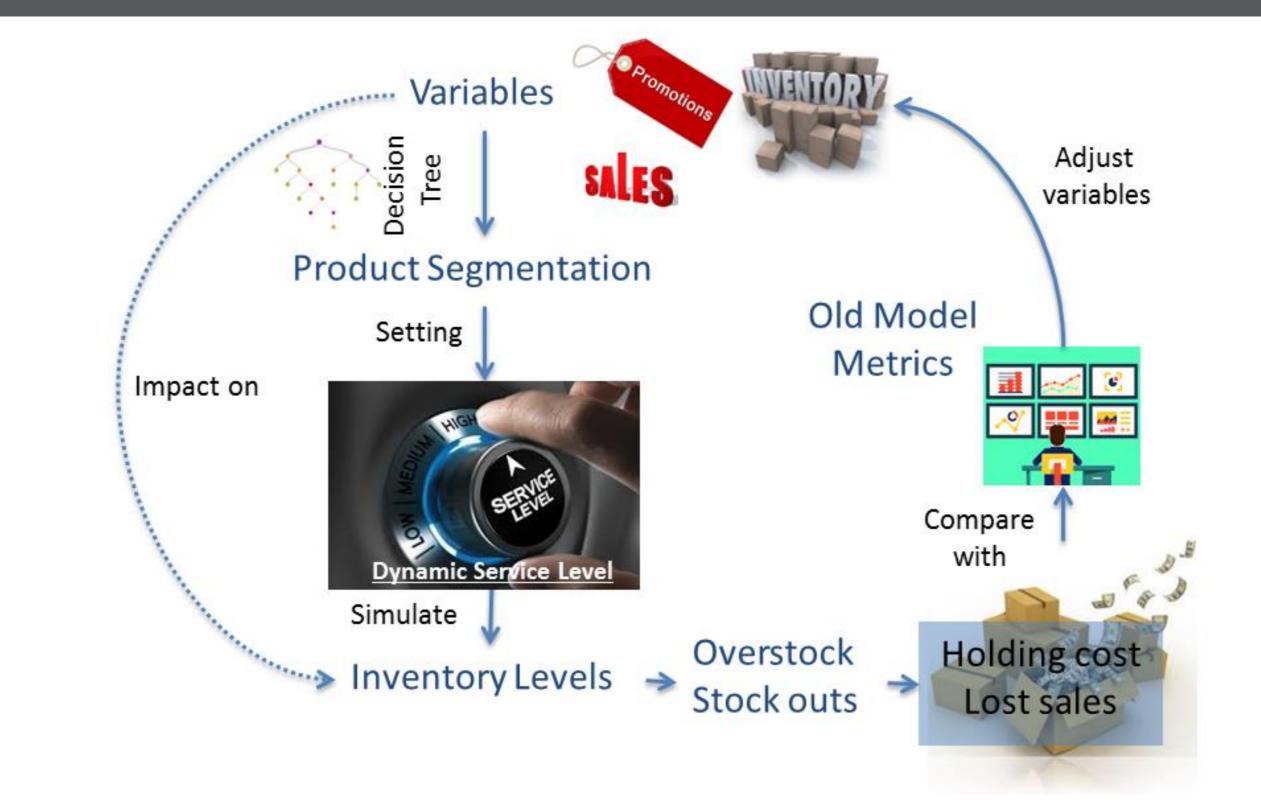
Relevant Literature

Teunter, Ruud H., M. Zied Babai, and Aris A. Syntetos. "ABC classification: service levels and inventory costs." Production and Operations Management 19.3 (2010): 343-352.

Zhang, Rachel Q., Wallace J. Hopp, and Chonawee Supatgiat. "Spreadsheet implementable inventory control for a distribution center." Journal of Heuristics 7.2 (2001): 185-203.



Methodology



Initial Results CSL Ceiling – 97% Retail 27% at Inventory ceiling Current (2) Item CSL Shelf **Presentation** Calculation 45% at **Last Week's** floor Sales CSL Floor – 81%

Expected Contribution

Dan Covert

- 1. Create a dynamic cycle service level calculation that can adapt to changing business needs.
- 2. <u>Decrease inventory holding costs</u> by procuring the correct promotional inventory at the right time. <u>Decrease labor costs</u> through a reduction of manual orders on promotions and holiday items.





