Store Receiving Optimization – Vitamin Shoppe 1B

Overview
The Vitamin Shoppe is a rapidly growing specialty retailer and direct marketer of nutritional products ranging from vitamins and minerals to nutritional supplements to health and beauty aids. Their operations include 484 stores which receive 46 million units of product per year from a range of 20,000 different items. Shipments to these stores go out typically twice per week and each shipment includes an average 50 totes carrying 1000 units. When the store receives their shipments associates have to go through the totes and pre-sort products based on shelf location within a store. Therefore, the team was assigned to optimize the store receiving process in order to create more time for associates to tend to customers.

Objectives
The Vitamin Shoppe requires the team to analyze the problem to come up with a solution that will reduce sorting and stocking time by a few minutes for each tote. Additionally, it should be easy to implement and inexpensive. Concepts should avoid any major interference to the efficiency of the distribution center as consequences may be costly and complicated.

Approach
- Conducted multiple visits to a typical Vitamin Shoppe store to understand the store receiving process first hand.
- On the store side, the team focused on the manual work of the store associates and tried to identify and eliminate all types of waste. On the DC side, the team focused on how totes were filled since this was identified to be the reason why pre-sorting is required at the stores.
- After multiple visits to the Harrisburg store, the team identified that the standards for staging, sorting, and shelving were not followed properly. This made it hard for the Vitamin Shoppe to improve since no standards mean no improvement (Lean saying: “No Standard, No Kaizen”).
- Concepts were selected mostly based on associate feedback but also backed up by quantitative data. One concept required the team to analyse a large amount of data using Microsoft Access in order to find patterns in the tote contents.
- All testing and data collection was done at the Harrisburg store since it was the closest to campus.
- The team tried to create an Arena model (a simulation model of the store) to test any modifications but an accurate Arena model was found to be extremely difficult to create due to the lack of data and variability of daily activities at the store.

Outcomes
- 2 concepts: Standard Workload Planning Sheet and Modified Label
- Increased transparency of information of tote contents
- Initiated a detailed standard for future improvements
- Incorporated new principles to the current procedure that reduced shipment completion time.