Overview

About three to four times a week SMBC receives an order for their pallets from all around the country. The main problem lays in the fact that each order is completely customized per what the customer wants, making it very hard to standardize the way the delivery trucks are loaded and making it impossible for the pallets to be mass produced. Customers are attracted to the customization and price of the pallets, but are pushed away by the high costs of shipping.

Objectives

Bring the shipping costs down to around 15% of the total cost of the order and develop an understanding of who is ordering most frequently, and from what area those orders are coming from.

Approach

- In order to understand the prices and freight costs of the pallets, four pallet sizes were studied
- To get a better understanding of the organization of the company, a visit to St. Marys, Pennsylvania was made early on in the project
- For each pallet size, the team analysed the price of shipping the order 100 versus 500 miles away
- Each of the four sizes were studied in orders of 30, 360, and 700 Lift™ Pallets
- To get a better understanding of what geographic regions were ordering most often, a mapping software called BatchGeo was used
- A call to a freight industry professional was made to determine the feasibility of buying a truck and trailer and to determine what factors go into the price of shipping

Outcomes

- It was found that most orders are coming in for sizes between 1500 – 2000 square inches (A pallet in this size range includes the standard 48”x48” pallet)
- Industries that use pallets most often include grocery, chemical and telecommunications
- Recommended new pricing structure, encourage minimum order quantity
- The greatest cluster of customers is found within the Mid-Atlantic states of Pennsylvania, New York, and Ohio
- Use nested and unnested pallet organization dependent on the size of the order