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**Re-Engineering Logistics:  
A Six Sigma Process**

# Re-Engineering Logistics: A Six Sigma Process

## Executive Summary

**Industry Department:** Manufacturer

**Process:** This project affected multiple aspects of the company, including manufacturing, inventory, logistics, and transportation.

### Objectives:

- Reduce Lead time from 7.7 to 2 days on average
- Improve Inventory Accuracy from 47% to 98% +
- Reduce the cost of PB Logistics from \$4.9m to less than \$4.0m annually
- Reduce Transportation Costs from \$1.40/Lb to \$0.70/Lb shipped

### Timeline:

- The project required approximately 11 months.

### Key Tools Used:

- Black Belt Tools were used in this project include but not limited to:
  - Capability Study – Initial and Final
  - Process Mapping
  - Cause and Effect Matrix
  - FMEA
  - Multi-Vari Study
  - Control Plans
- **SBTI can provide Black Belt Training, and teach all of the above techniques!**

### Deliverables:

- A RF data collection system was implemented in the stockroom
- Redundancies and non-value added process steps were eliminated

### Metrics or Results:

- **Total savings of \$4,762,000 were realized**
- Cycle Time down from 7.7 days to 1.65 days for a labor savings of \$58K
- Savings of \$2.798 Million from reduced Inventory Adjustments
- Savings of \$1.543 Million in Freight Cost

### Lessons learned:

- Similar Green Belt projects can be created in order to incorporate gains into other parts of the business
- The RF System can be extended to eliminate more paper forms
- Lean practices can be coordinated along with six sigma projects, incorporating the two practices.
  - SBTI Can help implement this!