

Client Background

Gared Performance Sports was founded in 1922 with original products including striking bag platforms and other items found in indoor sports facilities. Now, Gared Performance Sports is leading the sporting goods industry with products spanning all sports. Located in Noblesville, IN, Gared Performance Sports specializes in innovative, creative product design for parks, churches, schools, recreation centers, stadiums, and more.

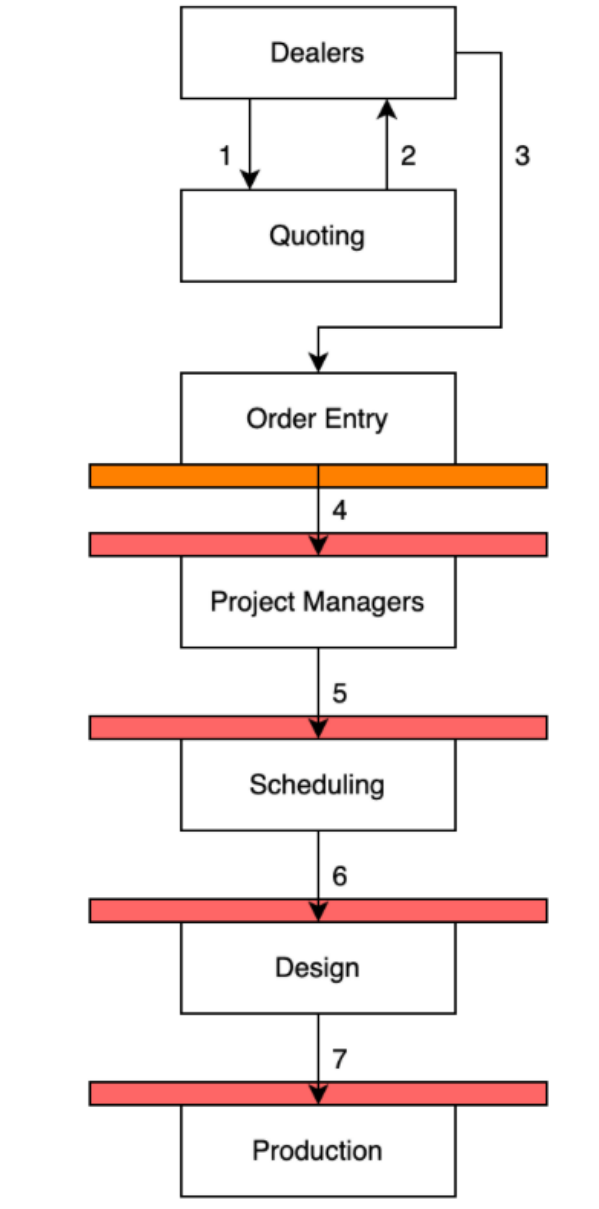


Problem Statement

The client is facing challenges in their production process due to a lack of standardization, insufficient storage space for oversized inventory, and an inefficient floor layout. With little to no metrics currently being tracked in the plant, there is confusion among management as to the facility's true output potential for their future facility. Processes between departments are not yielding the desired results, causing inefficient communication and inconsistencies regarding what should be produced.

Work Process Improvement Project

System Model



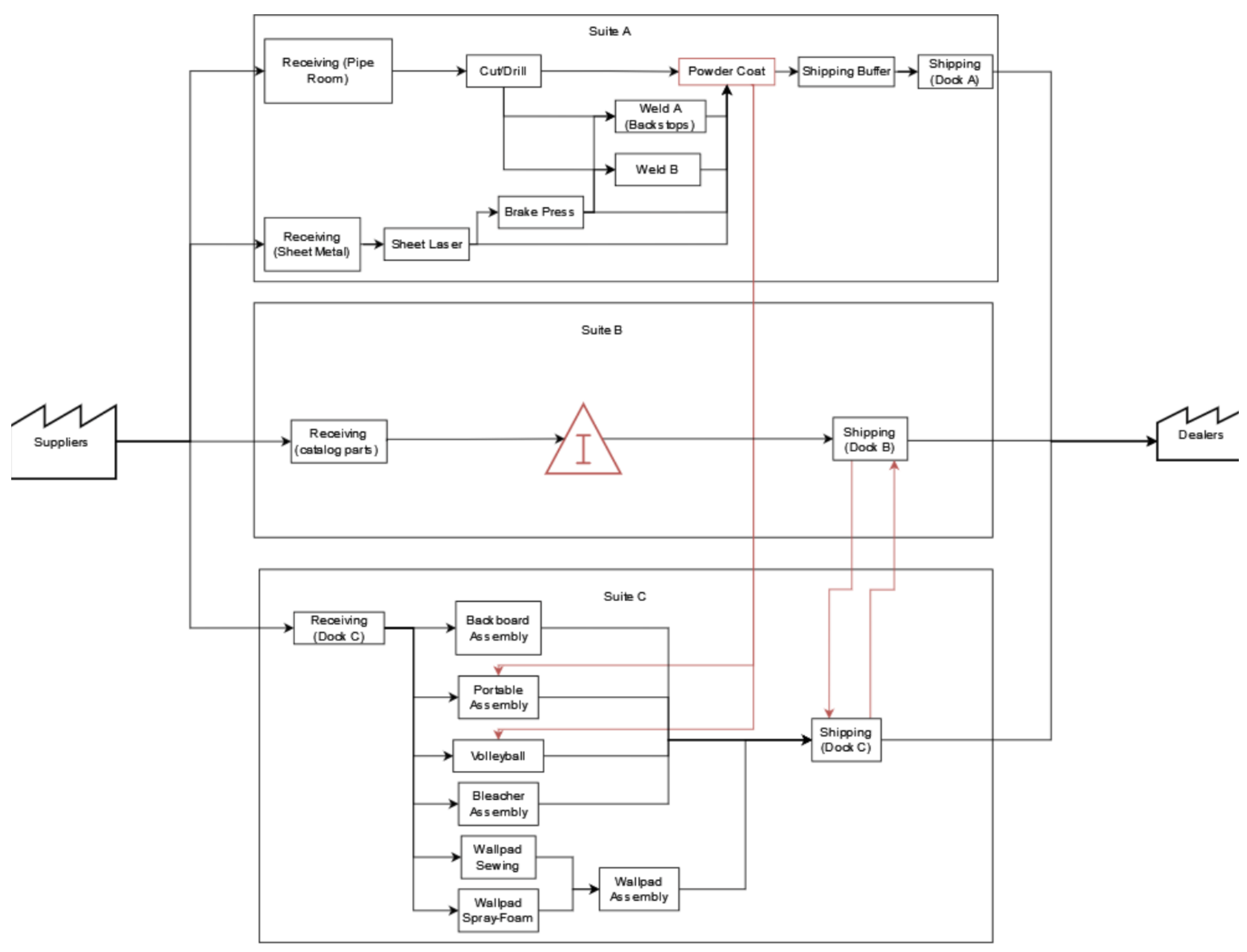
Problem Scope: Inefficiencies in communication between the Customer Service (Sales) and Engineering departments stemming from frequent changes in information/requirements. This leads to the need for repeated requests up the chain asking for additional details, in turn causing delays and increased confusion in the workflow.

Goal: Optimize flow of information and job processes between all departments, through the use of improved work instructions and the creation of overarching standardized operating procedures.

- Defined procedural requirements
- List of requirements before proceeding

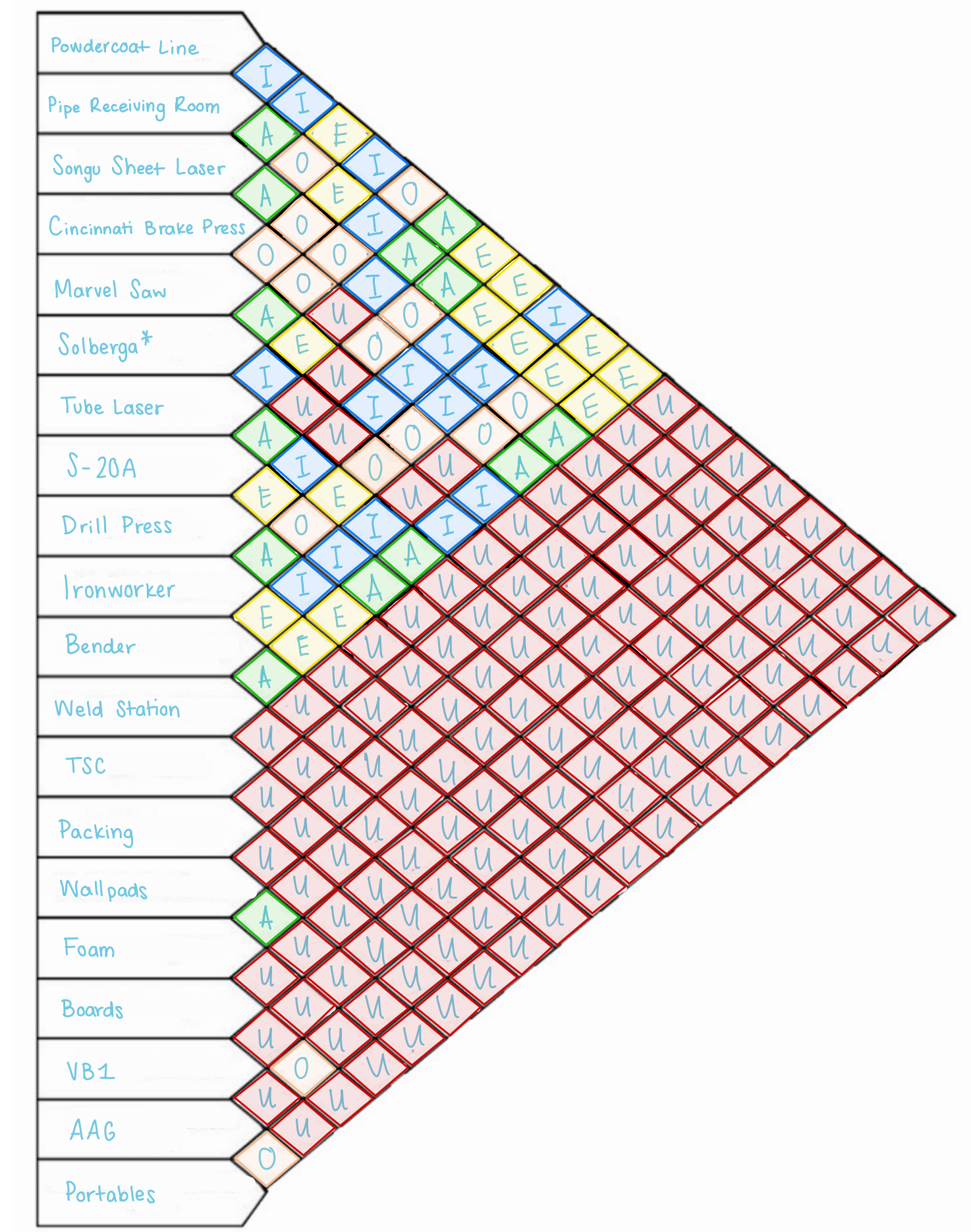
New Facility Layout Project

System Model



The system model shows the various processes and material flow routes in the current facility. Pain points arise due to material flow between three separate "suites" which are blocked by walls. In the current facility, there is not enough space for inventory and much of the overflow sits in aisle ways. With the new facility layout, the goal was to minimize the movement of material from the arrival to departure points and decrease manufacturing inefficiencies.

Methodology



The relationship chart created was based off the adjacency of all the areas or machines throughout the current facility. Rankings were given based on the following scale: 'A' for absolutely necessary, 'E' for especially important, 'I' for important, 'O' for ordinary closeness, and 'U' for unnecessary. Measurements were taken for all areas and machines within the current facility as there was no current facility CAD model to base the future state on.

Methodology

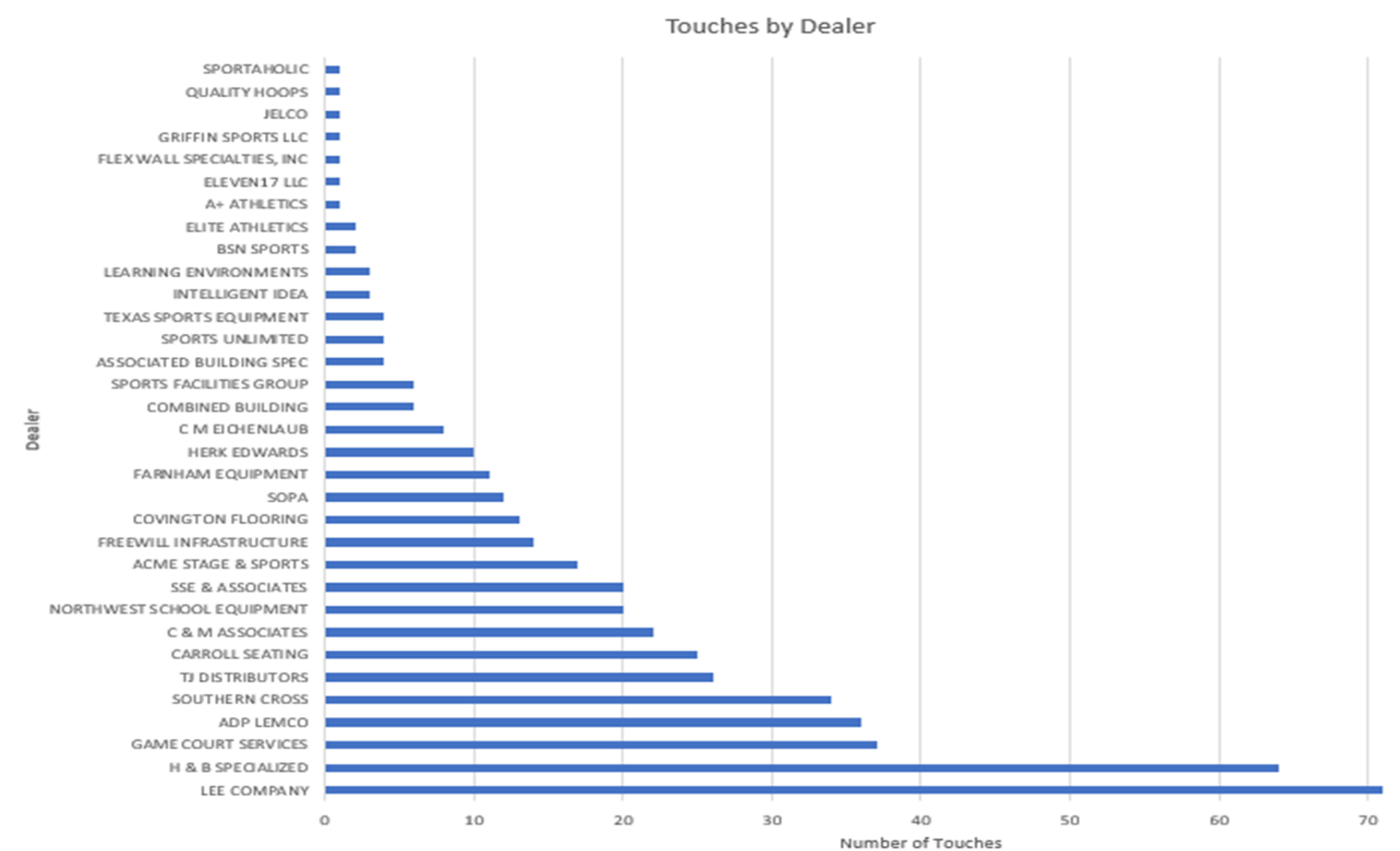
- Work Process Improvement through Process Flow Analysis
 - Examining all departments, job functions, and individual roles
 - Determining checklists for Order Entry, Project Management, and Engineering
 - Verifying requirements through individual reviews (task overview)
- Edited/Developed work instructions for each role
- Curated potential solutions to improve information flow

Results

The objective of these updated work instructions is to clarify and simplify the process goals which would allow for untrained eyes to understand and ensure there is a proper flow of information. Additionally, providing potential solutions to incorporate that will strengthen the validity and continuity throughout the work process.

Future Solutions

- Work Instructions with Pictures/Videos
- Automate Scheduling Database
- Revamp Folder Naming System
- Implement Excessive Revision Fees for Dealers



Takeaway: Top 5 dealers account for over 50% of total resubmittals

Results

Current Facility Statistics:

- About 114,000 square feet
- 3,200 feet of inventory racking
- 200 foot long powdercoat line

New Facility Statistics:

- 239,000 square feet
- Over 5,000 feet of inventory racking
- 630 foot long powdercoat line