IPRO 345: Improving Food Packaging Processes Using Process Mapping Techniques

Team Members:

Remi Adejinle Wojciech Blaszynski Chaturi Gunasekera Crina Popa Nicole Reigle Kathleen Baker Pankti Gala Adam Kuuspalu Olakunle Popoola Deepthi Veliyathuparambil

Outline

- Background
- Problems
- Work Breakdown Structure
- Objective
- Methodology
- Results
- Conclusion

Background

- Third generation family owned company since 1958
- Produces specialty lunch and deli meats
- Three manufacturing facilities
 - Lansing, IL (Headquarters)
 - Madisonville, KY
 - Searcy, AR



Great Tasting Lunchmeat

Areas of the plant

- Formulation
- Packaging

Problems

Product flow and congestion

- Multiplicity of tools
- Lack of storage system





Work Breakdown Structure

Based on problems, the IPRO 345 team was divided into 2 projects:

- Project 1: Plant Layout
- Project 2: Tools & Storage

Work Breakdown Structure



Objective

- Project 1: Plant Layout
 - Understand Formulation Process
 - Analyze traffic flow of product
 - Propose an efficient plant layout
 - Justify proposed changes

Methodology

- Project 1: Plant Layout
 - Map plant layout
 - Track machine frequency
 - Identify points of congestion
 - Identify traffic flow of product

Result

- Project 1: Plant Layout
 - Identified bottlenecks
 - Understood production process
 - Track frequency of machine usage

Objective

- Project 2: Tool Organization
 - Prepare inventory of tools
 - Standardize tools
 - Improve storage locations

Methodology

- Project 2: Tool Organization
 - Catalogue all tools
 - Identify the use, storage location and employee preference

Result

- Project 2: Tool Organization
 - Reduced number of tools
 - Recognized convenient storage locations
 - Implemented 5S strategies

Conclusion

- Project 1: Plant Layout
 - Proposed economically efficient plant layout
- Project 2: Tool Organization
 - Metal shovels versus plastic shovels
 - 4 tooth Rakes–Grinders
 - 3 tooth Rakes-Mixers
 - Cords attached to scoops

Acknowledgements

- Land O'Frost
- Advisor Philip Lewis
- IPRO Office

