IPRO 345: Improving Food Packaging Processes Using Process Mapping Techniques

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

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