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1st Flow Feed System Failure Analysis

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IOWA STATE UNIVERSITY Department of Agricultural and Biosystems Engineering

Chad Bonar, Carter Buswell, and Jessica Hanrahan

1st Flow Feed System Failure Analysis

Client: 1st Flow, Lawler, Iowa

Problem Statement

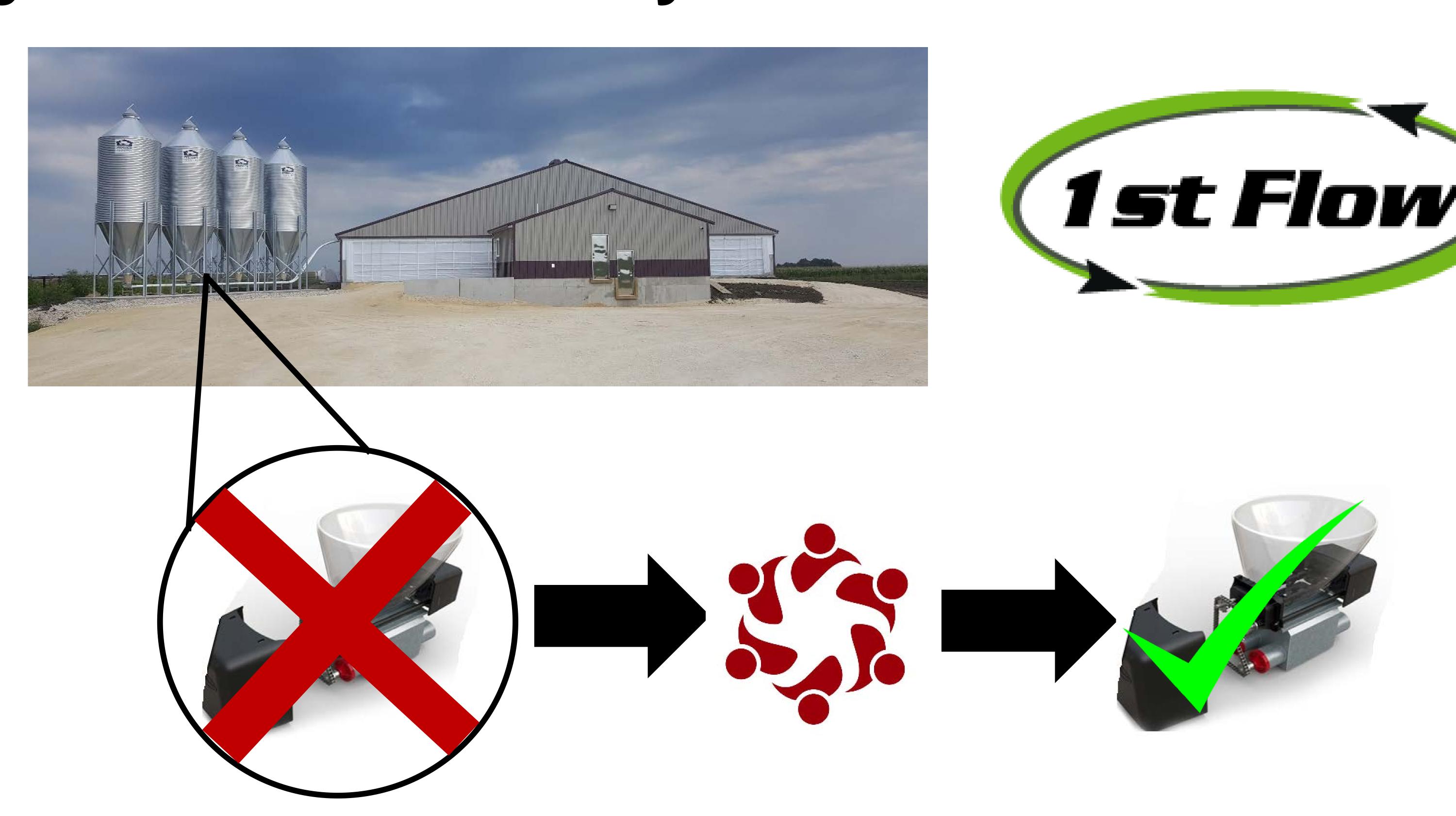
- Current 1st flow models are prone to cracking stripping for unknown reasons
- Customers do not want to buy a product that fails

Objectives

- Determine components affected by failures
- Analyze components determine cause of failures
- Provide recommendation reports based on data collected

Methods

- Failure Mode and Effect Analysis Report (FMEA)
- CAD Simulation
- Physical analysis of system components



Proposed Solutions

 Create a recommendation report base on determined failures

Major Outcomes

- Determine Failures
- Provide Recommendation Report
- Provide accurate cost analysis for recommendations

Benefit to Client

- Knowledge of failure points
- Access to information to potentially increase product reliability