

Generating a Predictive Model for Injury Rates for a Chemical Manufacturing Company



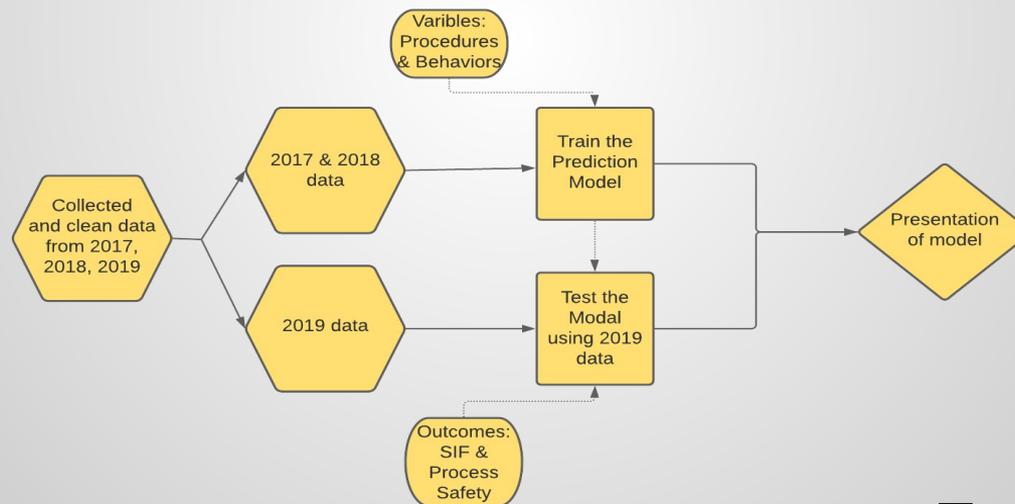
Jacob Ledford, Charles Riggs Matthews, Haley Henderson, Catherine Parks, Samuel Biggs, Royale Nicholson, Dr. Shawn Bergman, Dr. Yalçın Açıkgöz & Dr. Timothy Ludwig

Use company-level data from the manufacturing industry to create a model that predicts workplace injuries

Background

- Fatal work injuries have remained constant over time (U.S. Bureau of Labor Statistics, 2019)
- Incident prevention is attenuating
- Predictive analytics proven to be successful
- Manufacturing significance

Methods



Implications

- Reduce safety incidents at test company
- Prove company level data with many variables can detect hidden trends and bolster predictive power
- Provide guidance to other researchers

Acknowledgement: National Institute for Occupational Safety and Health 