

# Sequence model for asset failure prediction [natural resources]



## Business Objective

- Accumulate sensor data and other inputs and build prediction models for equipment failures
- To identify highly probable machines to fail for proactive intervention along with path to failure
- To manage and control “what might happen”



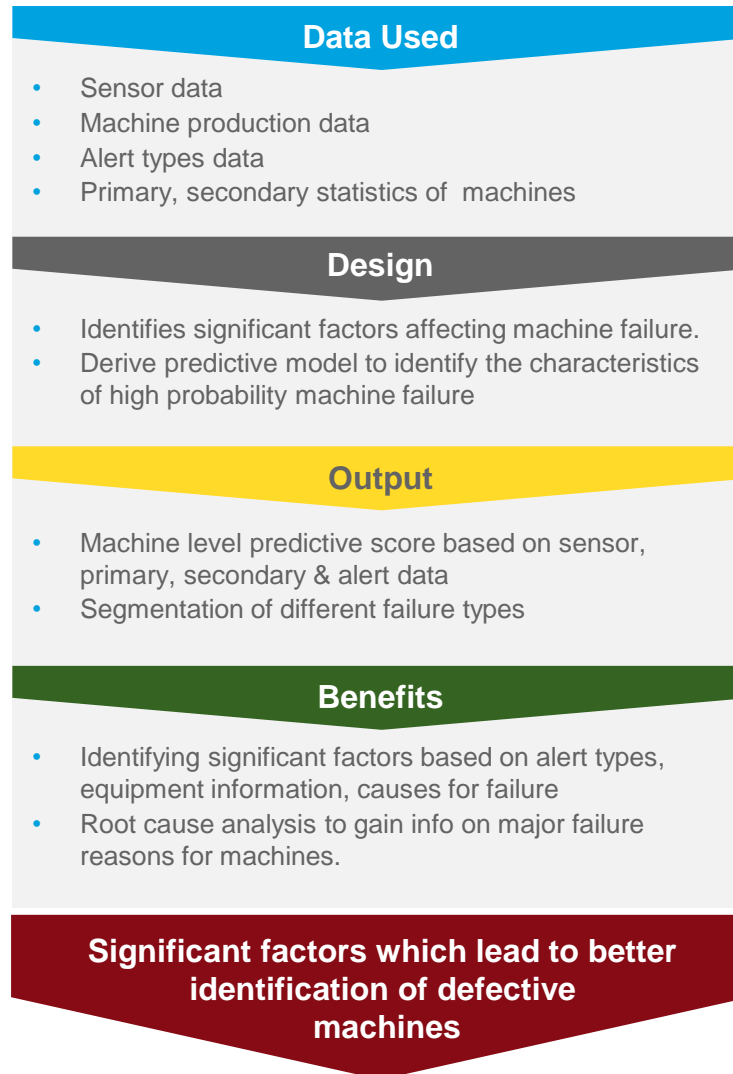
## Benefit

- Service processing lead time can be significantly reduced
- Optimization of cost of service
- Helps accurately predict failures
- Increase in productivity



## Expected Outputs

- An interactive dashboard to help clients reduce the future failures and maintenance cost
- A predictive model with probability score for individual machine to fail in the future



- Descriptive analysis on sensor, alert, primary & secondary data capturing the machine characteristics
- Sankey Diagram to represent the major paths leading to failure and non failure



- Logistic regression to identify key drivers
- Daily failure probability prediction to identify the next failure event
- Neural Network to provide better prediction



- Model equation and predicted failure score for proactive intervention management in high failure segments
- Futuristic predicted failure probability with significant variables information