Nordic Sensing Company Problem Statement [Adi Tonangi]

Summary:
Nordic Sensing Company (NSC) supplies InSense sensors for domestic energy tracking. NSC receives materials from twenty six vendors and manufactures these sensors in four Asian countries. In their current report they found fifteen percent fail rate, while huge orders are waiting from their customers. NSC's request is to bring down the rate of failure under five percent. We are helping NSC to reach its goal with data science and machine learning modeling as soon as possible

Context:
Nordic Sensing Company (NSC), is providing energy tracking InSense sensors for household energy usage. NSC has four manufacturing plants in Asia. They noticed current sensor failure rate is 15%. These failed sensors could be due to the bad parts used to make sensors, or/and NSC's manufacturing processes. It's plan is to bring down the rate of fail under 5% immediately, as they have very large orders from each of their three clients

Criteria for success:
There are 26 suppliers for seven InSense sensor parts. Sample data will be collected from NSC's suppliers and their plants in Asia to create data science and machine learning models to lower the fail rate under 5%

Scope of solution space:
After getting sample data from NSC's InSense plants and from their vendors, a planned urgent action will be taken with our data science and machine learning knowhow to bring down the fail rate below 5%.

Constraints within solution space:
As there are massive orders from NSC's clients, the InSense sensor data modelling and testing will be treated as an urgent matter. This is based on the assumption we receive the data from NSC in time.

Stakeholders to provide key insights:
Tony Abraham: InSense VP
Vince Maccano: Head of Data Science
Gary Neumont: Head of Manufacturing
Jessica Jones: QA/QC Engineer
Shane Bucholtz: Head Engineer

What key data sources are required:

Samples of data will be collected from NSC’s InSense makers in Asia and from its vendors, in a timely manner to create data models to meet NSC’s customer orders with fail rate under 5%