

# Problem Statement Worksheet (Hypothesis Formation)

**Nordic Sensing Co. needs to reduce the sensor failure rate below 5% from recent 15% through figuring out which suppliers and/or manufactures could be the cause of the increased failure.**

## 1 Context

Nordic Sensing Co, a top sensor company, is focusing energy consumption and production. In the early stage of sensor development, 1-2% failure rate is considered normal. The failure rate of InSense new sensors has increased to 15% in last two quarters. The management has expressed the concern to investigate the causes.

## 2 Criteria for success

- Find out the possible causes of the 15% high failure rate of InSense new sensors ASAP. Suppliers of parts or manufacturing ?
- Bring the failure rate below 5% for InSense new sensors for the incoming massive orders.

## 3 Scope of solution space

Mainly checking 26 suppliers of 7 parts and manufacturing related to InSense sensors in Singapore (one of 4 factories in Asia solely focus on this product).

## 4 Constraints within solution space

Data from Cert has only covered the results of manufacturing dates of recent two quarters that used for testing.

## 5 Stakeholders to provide key insight

- Tony R. Abraham (VP, InSense)
- Vince Maccano
- Jane smith

## 6 Key data sources

- Data from Cert in Excel format
- 20k row only from last two quarters