

# Problem Statement Worksheet (Hypothesis Formation)

**How can Nordic Sensing Co. get the sensor failure rate back down below 5% by shutting down the manufactures with poor manufacturing and stopping buying faulty parts from suppliers?**

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## 1 Context

There is a sharp increase in InSense sensor failures in March during pre-shipping testing. The failure rate is 15% which is not acceptable. We have massive advance orders from each of our three accounts. We need to identify the possible causes of these failures as soon as possible, and act accordingly.

## 2 Criteria for success

Bring the sensor failure rate down below 5%

## 3 Scope of solution space

Identify the causes of InSense sensor failures.  
Shut down the manufactures with poor manufacturing  
Stop buying faulty parts from suppliers

## 4 Constraints within solution space

The system limits exports. The data from cert has only 20k rows, not complete.

## 5 Stakeholders to provide key insight

James Hansk – CEO  
Otto Evans – InSense President  
Tony Abraham – InSense VP

## 6 Key data sources

Data from Singapore – contains the vendor codes for each part  
Data from Cert – contains which drives failed by the “STATUS” column and covers manufacturing dates going back two quarters with dated results for testing.

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