**Problem Statement:** Which manufacturers or suppliers should Nordic Sensing shut down or stop buying from to decrease their failure rates from 15% to lower than 5%?

| **Context:**  Nordic Sensing Co. is a manufacturer of energy tracking sensors with four factories in Asia, and 26 suppliers for the seven InSense sensor parts. InSense is NSC’s newest offering in the residential energy usage space, so a 1-2% failure was normal and expected, however the current failure rate is 15%. With massive advance orders coming from each of the three accounts, the company needs to know which manufacturer to shut down or parts supplier to stop buying from in order to get the failure rate back down below 5%.  **Criteria for Success:**   * Reduce the failure rate of the sensors from 15% to 5% as soon as possible. * Find what manufacturers or suppliers are the cause of the failures.   **Scope of Solution Space:**   * Manufacturers and suppliers who have a ‘FAILED’ status in the data from Cert. * Following that status to find which factory made the sensor, and what manufacturer or supplier the parts came from. | **Constraints Within Solution Space:**  The cause of increased failures could be due to a combination of faulty parts and poor manufacturing, or it could be specific to one factory.  **Stakeholders to provide key insight:**   * James Hansk - CEO * Otto Evans - InSense President * Bernard Ong - CTO * Karen Chu - Lithbat President * Shane Buchholz - Head Engineer * Tony Abraham - InSense VP * Vince Maccano - Head of Data Science * Anna Landis - Lithbat VP * Gary Neumont - Head of Manufacturing * Jessica Jones - QA/QC Engineer   **What key data sources are required:**   * Data from cert : tells which drives failed, covers manufacturing dates going back two quarters with dated results for testing, and connects the parts suppliers and manufacturer to each InSense sensor and whether it failed on testing. |
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