**Project Title:** Analytics For Hospital's Health-Care Data **Project Design Phase-I – Solution Fit Template** **Team ID:** PNT2022TMIDXXXX

Define CS, fit

**1. CUSTOMER SEGMENT(S)**

- Patients
- Hospital Management

**6. CUSTOMER CONSTRAINTS**

Customers require more accurate and early predictions of Length of Stay (LOS).

**5. AVAILABLE SOLUTIONS**

There are few Length of Stay prediction model available which lacks in predicting some exceptional case where the length of stay may extend.

Explore AS,

Focus on J&P, tap

**2. JOBS-TO-BE-DONE / PROBLEMS**

Length of stay prediction may vary based on the patient's stage/severity of disease. Patient may get dissatisfied if there is no bed availability.

**9. PROBLEM ROOT CAUSE**

Unpredictable length of stay and improper medical records are the root cause of the problem.

**7. BEHAVIOUR**

Developing a model which predicts the length of stay of unexceptional cases with better accuracy.

Focus on J&P, tap

Identify strong TR & EM

**3. TRIGGERS**

To accurately predict the length of stay.

**4. EMOTIONS: BEFORE / AFTER**

Before : Pateints often get frustrated and depressed.

After: They feel better and get new beginning.

**10. YOUR SOLUTION**

Our solution includes using algorithms like Fuzzy Logic, Tree Bagger, Random Forest, and Decision Trees to predict the length of stay more accurately. Gives frequent update about the bed availability.

**8. CHANNELS of BEHAVIOUR**

Users will check for bed availability.

Identify strong TR & EM