**Project Title:** ANALYTICS FOR HOSPITALS HEALTH CARE DATA

**Project Design Phase-I - Solution Fit Template**

**Team ID:** PNT2022TMID27276

### 1. CUSTOMER SEGMENT(S)

Who is your customer?
i.e. working parents of 0-5 y.o. kids

- Patients
- Hospital management

### 6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.

Customers require more accurate and early predictions of Length of Stay

### 5. AVAILABLE SOLUTIONS

Which solutions are available to the customers when they face the

or need to get the job done? What have they tried in the past? What pros &

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

Focus on J&P, tap into BE, understand RC

### 2. JOBS-TO-BE-DONE / PROBLEMS J&P

Which jobs-to-be-done (or problems) do you address for your

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

### 9. PROBLEM ROOT CAUSE RC

What is the real reason that this problem exists? What is the back story behind the need

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

### 7. BEHAVIOUR BE

i.e. directly related: find the right solar panel installer, calculate usage and

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

Focus on J&P, tap into BE, understand RC

### 3. TRIGGERS TR

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

To accurately predict the length/time of stay of patient

### 10. YOUR SOLUTION SL

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.
If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

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 CH

**8.1 ONLINE**
What kind of actions do customers take online? Extract online channels from #7

**8.2 OFFLINE**
What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development

8.1
Users will check for bed availability
8.2
history of bookings of bed and others

EM & IDENTIFY EMERGENCE

IDENTIFY

**4. EMOTIONS: BEFORE / AFTER** EM

How do customers feel when they face a problem or a job and afterwards?
i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

Before : Patients often get frustrated and depressed.
After: They feel better self  and get a new beginning