Project Title: **Analytics For Hospitals' Health-Care Data**

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

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1. CUSTOMER SEGMENT(S) `CS`
Define CS, fit into CC

- ❖ Patients with incidental needs;
- ❖ Patients with chronic conditions; persons with multiple health problems and illnesses (often elderly);
- ❖ Patients needing precise elective interventions;
- ❖ Patients needing qualified accident and emergency services and tertiary care patients.

6. CUSTOMER CONSTRAINTS `CC`

- ❖ Patient data privacy.
- ❖ Data Regulations.
- ❖ Data Compliance.
- ❖ Data acquisition.

5. AVAILABLE SOLUTIONS `AS`
Explore AS, differentiate

- ❖ Electronic Health Records (EHRs)
- ❖ Personal Health Records (PHRs)
- ❖ Electronic Prescription Services (E-prescribing)
- ❖ Patient Portals
- ❖ Master Patient Indexes (MPI)

2. JOBS-TO-BE-DONE / PROBLEMS `J&P`
Focus on J&P, tap into BE, understand RC

- ❖ LOS prediction.
- ❖ Bedding and resource allocation.
- ❖ Optimized treatment.
- ❖ Solving financial problems.

9. PROBLEM ROOT CAUSE `RC`

- ❖ Lack of maintaining the available resources.
- ❖ Infection risk for Doctors and nurses.

7. BEHAVIOUR `BE`
Focus on J&P, tap into BE, understand RC

- ❖ To analyse the patient data.
- ❖ To predict the patient LOS.
- ❖ To allocate efficient bedding and resources.
- ❖ To allocate optimized treatment.

3. TRIGGERS `TR`
Identify strong TR & EM

- ❖ For efficient use of medical and financial resources.
- ❖ Increasing infection risk.
- ❖ Increased waiting time for emergency patients.

10. YOUR SOLUTION `SL`

Analyzing that health data has allowed for a better understanding of how to respond and treat patients. We can collect all the data we want, but it doesn't do any good if we don't know what to do with that information. We need a centralized, systematic way of collecting, storing and analyzing data. so we can use this as a framework for predicting patient LOS in advance. This parameter

8. CHANNELS OF BEHAVIOUR `CH`

8.1 ONLINE
- ❖ Analysis of Data collected.
- ❖ Accessing Application's features.

8.2 OFFLINE
- ❖ Data collection.
- ❖ Implementing the suggestions provided by the application.

Identify strong TR & EM

4. EMOTIONS: BEFORE / AFTER

`EM`

- ❖ Insecure —>Secure
- ❖ Negative —> Positive
- ❖ Scared —> Brave

helps hospitals to identify patients of high LOS-risk (patients who will stay longer) at the time of admission. Once identified, patients with high LOS risk can have their treatment plan optimized to minimize LOS and lower the chance of staff/visitor infection. Also, prior knowledge of LOS can aid in logistics such as room and bed allocation planning.