

## Project Design Phase I

### Problem Solution Fit

Date	23 September 2022
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Project Name	Analytics for Hospitals' Health-Care Data
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#### 1. Customer Segments

My customers are various Hospitals, Medical Professionals and Hospital Staffs.

#### 2. Customer Constraints

Limitations For my customer to buy/use my product or service are

1. Difficulty in migrating from manual process because they are used to manual process so are unable to speedily cope with the new systems
2. Fear of security breach
3. High cost of software development and deployment
4. Lack of IT friendly medical personnel
5. Huge influx of patients visiting hospitals

#### 3. Available Solutions

The solution available are

1. Pen and paper method in rural small health cares, which needs to be maintained, manual works, slower and time consuming process.
2. Hospital management system which contains registration storing details.

#### 4. Jobs to be

#### Done/Problems

The main jobs to be done are

1. Resource allocation
2. Improved Patients care
3. Avoid errors and track every single details
4. Improve data security and retrieve ability
5. Enhanced decision making in clinics
6. Easy access to patients data
7. Schedule duties to staffs

#### 5. Problem root cause

The main Cause are

1. Huge influx of patients visiting hospitals
2. Time Consuming to collect, store patients data
3. Lack of security, inconsistency in data entry.
4. Prone to damage and being misplaced
5. Hard to make changes, editing problems
6. Limit communication and collaboration
7. Log process to analyse and allocate jobs
8. Lots of manual works

#### 6. Behaviour

1. The customer should work and move for advanced techniques
2. Use hospital management systems
3. Purchase products or services that store, maintain and process the data
4. Use analysis
5. Use advanced technology to analyse and work on patients data

#### 7. Triggers

The triggers for my customers are

1. Facing the existing challenges, and difficulties
  2. Looking at other sectors growing
  3. Advancements and growth in technology
  4. Increased productivity from hospital management system
- Increased analytics work

#### 8. Your Solution

The solution is to accurately predict the Length of Stay (LOS) for each patient on a case by case basis so that the Hospitals can use this information for optimal resource allocation and better functioning.

This parameter helps hospitals to identify patients of high LOS-risk 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

#### 9. Emotions: Before/After

Before

1. Frustrated, confused
2. Inefficient time management
3. Poor resource allocation, staffing
4. Worried about huge stuffs of work, workload
5. Work pressure

After

1. Secured, find it easy, efficient and reliable
2. Efficient time

	<p>knowledge of LOS can aid in logistics such as room and bed allocation planning. A informative, creative dashboard can be created to present the data and utilize it for prior proper planning and resource allocation.</p>	<p>management</p> <ol style="list-style-type: none"> <li>3. Better resource allocation</li> <li>4. Less manual work</li> </ol> <p>Need to develop technical knowledge</p>
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## 10.Channels of Behavior

### Online

Customers can purchase the service/product and use it to store patients data regularly, maintain their details, create dashboards and work on it online efficiently and effectively

### Offline

Using the collected data, customers can interpret, analyze, and utilize the data to allocate resources, schedule jobs to staffs, do planning for proper management of hospital