Project Design Phase-I - Problem-Solution Fit

Date	**1 October 2022**
Team ID	**PNT2022TMID03446**
Project Name	**ANALYTICS FOR HOSPITALS' HEALTH-CARE DATA**
Maximum Marks	**4 Marks**

Define CS, fit into CC

CS

1. CUSTOMER SEGMENTS

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

CC

6. CUSTOMER CONSTRAINTS

Limitations for my customer to buy/use my product or services are

1. Difficulty in migrating from manual process because they are used to manual process so are unable to speedily cope with the new system
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

AS

5. AVAILABLE SOLUTIONS

The solutions 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.

Explore AS, differentiate

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

The main jobs to be done are

1. Resource allocation
2. Improved patient 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 patient data
7. Schedule duties to staffs

9. PROBLEM ROOT CAUSE

RC

The main causes are

1. Huge influx of patients visiting hospitals
2. Time consuming to collect, store patient 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. Long process to analyse and allocate jobs
8. Lots of manual work

7. BEHAVIOUR

BE

1. The customer should quit the existing manual works and move for advanced techniques

2. Use hospital managements systems

3. Purchase products or services that stores, maintains and process the data

4. Use analytics

5. Use advanced technology to analyze and work on patients data

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

Identify strong TR & EM

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3. TRIGGERS TR

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
5. Increased analytics work

4. EMOTIONS: BEFORE / AFTER EM

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 management
3. Better resource allocation
4. Less manual work
5. Need to develop technical knowledge

10. YOUR SOLUTION SL

The solution is to accurately predict the Length of Stay(LOS) for each patient on 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 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.

8.CHANNELS of BEHAVIOUR CH

8.1 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

8.2 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