Project Title: Analytics for hospital health care data **Project Design Phase-I - Solution Fit Template** **Team ID:** PNT2022TMID23353

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

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

Hospital management who manage all the data.

6. CUSTOMER CONSTRAINTS

CC

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.

Maintenance, budget,System maintenance problem,No cash,Network Errors,Data privacy and security,Regulations and compliance,difficulty in training users technically ,shortage of health informatics professionals,data interoperability, Less experienced staff Shortage in equipment facilities ,low knowledge in using High end professional devices

5. AVAILABLE SOLUTIONS

AS

Which solutions are available to the customers when they face the problem

or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking.

Most healthcare organizations collect EMR abstracts, claims data, and data about enrollment and medical programs.
Only leading organizations additionally use electronic EMR feeds and disease management program data.
Very few organizations use non-health data sources that can be used to augment formal medical data, such as patient lifestyle information, remote monitoring and wearable devices, and survey data about patient experience.

Explore AS, differentiate

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 customers? There could be more than one; explore different sides.

The goal is to predict the length of stay using predictive analysis tools that makes predictions using historical data combined with statistical modelling. Patterns and relationships among the diseases, frequency in the season and number of days for recovery and are identified using data visualization. techniques by using the processed data.

9. PROBLEM ROOT CAUSE

RC

What is the real reason that this
problem exists? What is the back story
behind the need to do this job?
i.e. customers have to do it because of the change in regulations.

Process of examining raw datasets to find trends, draw conclusions and identify the potential for improvement. Health care analytics uses current and historical data to gain insights, macro and micro, and support decision-making at both the patient and business level.
The use of health data analytics allows for improvements to patient care, faster and more accurate diagnoses, preventive measures, more personalized treatment and more informed decision-making. At the business level, it can lower costs, simplify internal operations and more.

7. BEHAVIOUR

BE

What does your customer do to address the problem and get the job done?

i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

It identifies the patient's admission, attending, and frequency of the stay they have in the particular hospital. And majorly to manage the accounts and data that are to be handled by making physical documents and records and finally they are uploaded in the method of software-oriented Files and it is monitored by Data Analysts to decide the results.

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

Identify Strong TR & TM

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.

The covid-19 pandemic proved the importance of resource management. Several people died due to unavailability of hospital beds, ventilators etc. It is during such crucial moments; we step back and realize the importance of planning the length of stay (LOS) of patients before hand

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: There is no proper data collection and analysis. Lack of privacy and security
After: monitoring of patient's data, tracking of medical inventory and assets, organizing collected data and visualization of data on the dashboard and the reports

Before: There is no proper data collection and analysis. Lack of privacy and security, Data storage, Data cleaning.
After: monitoring of patient's data, tracking of medical inventory and assets, organizing collected data and visualization of data on the dashboard and the report.

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 behavior.

Collecting data from patients
Analyzing the needs of hospitals
Structuring and sorting the data for use
Performing Data Analytics using various tools
Implementing algorithms on the data to extract insights
Building predictive models with the development team

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

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

To handle all the documents and Records of the length of stay about the patients and manage them in a proper way.
They must give proper details about the patient and accurate medications that are advised to follow.

8.2 OFFLINE

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

The treatment and consultation that are to be done in offline that must be of full effective to the patients as they follow the Physician's advice and allowing their admission in respective beds and the major equipment for the treatment.

Identify Strong TR & TM