

Project Design Phase-I
Proposed Solution Template

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| Date | 02 October 2022 |
| Team ID | PNT2022TMID53545 |
| Project Name | Analytics for Hospitals' Health-Care Data |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

| S.No. | Parameter | Description |
|-------|--|---|
| 1. | Problem Statement (Problem to be solved) | Recent Covid-19 Pandemic has raised alarms over one of the most overlooked areas to focus: Healthcare Management. While healthcare management has various use cases for using data science, patient length of stay is one critical parameter to observe and predict if one wants to improve the efficiency of the healthcare management in a hospital. This parameter 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. |
| 2. | Idea / Solution description | To accurately predict the Length of Stay for each patient on case by case basis so that the Hospitals can use this information for optimal resource allocation and better functioning. The length of stay is divided into 11 different classes ranging from 0-10 days to more than 100 days |
| 3. | Novelty / Uniqueness | Using IBM cognos we can able to predict and analyze the patient details without any difficulties. Which produces instant calculation of datasets provided by the user |
| 4. | Social Impact / Customer Satisfaction | The social impact of this project is that Hospitals can use this information for optimal resource allocation and better functioning |
| 5. | Business Model (Revenue Model) | Used to produce the availability of the beds in hospital prior to that date so patient be aware of booking the room in advance to take treatment |
| 6. | Scalability of the Solution | Can create a government app and can update the information on the availability of beds in real time so that if there is an emergency, the ambulance driver could take the patient to the hospital where the bed is available. |