

# PROPOSED SOLUTION

| S. No | Parameter                                   | Description   |
|-------|---|---|
| 1     | Problem Statement<br>(Problem to be solved) | <p><b>Analytics for Hospitals Health-Care Data:</b></p> <p>Hospitals have some main challenges such as deficient infrastructure, deficient manpower, unmanageable patient load, etc. so people can benefit if these problems are solved by adhering to certain software or some notes to maintain them all.</p> <p>The goal is to accurately predict the Length of Stay for each patient on a 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.</p> |
| 2     | Idea/Solution description                   | We are able to predict the length of stay of patients with data from the moment they enter the hospital and are diagnosed with an accuracy of ~70%. Such a model has the ability to profoundly improve hospital management and patient well-being.  |
| 3     | Novelty/Uniqueness                          | Length of stay in the hospital differs based upon the critical in their health situation it can range between 2 to 3 days or even up-to 10- 20 days so based on the exploratory analysis of various patients we can accurately predict the length of stay of patients and can allocate optimum resource allocation.   |
| 4     | Social Impact/Customer satisfaction         | With Exploratory analysis using different methods to predict the length of stay creates a way the patients to know the vacancy of beds in the hospitals and also paved a way in their critical times to secure their better life.   |
| 5     | Business Model (Revenue Model)              | Using this model The usage of length of stay of patients in the hospitals has increased among the people and it is free of cost to get the details about the vacancy. It doesn't affect the revenue model.  |
| 6     | Scalability of the Solution                 | <p>It is a easily scalable method using dataset of previous patients we can able to predict the LOS</p> <ul style="list-style-type: none"> <li>• Increased productivity among the users</li> <li>• Decreased stress level</li> <li>• Possibility of getting the detailed list of vacancy</li> </ul>   |