

Proposed Solution :

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

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">• Users create multiple analytical graphs/charts/Visualizations.• Using the Analytical Visualizations, build required Dashboard(s).• Saving and visualizing the final dashboard in the IBM Cognos Analytics.
2.	Idea / Solution description	Building the following visualizations and drawing appropriate conclusions: <ul style="list-style-type: none">• Average Age for different Chest Pain Types• Average Max heart beat achieved during Chest Pain• Resting Blood Pressure variation with Age• Effect of Existing Heart Diseases on Average Max Hearbeats Achieved• Average age for Chest pain type wrt existing heart disease• Serum Cholesterol levels vs Age plot• Effect of Existing heart disease on Fasting Blood Sugar
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Performing Exploratory Data Analysis on the chosen dataset, scaling and encoding features.• Using various linear classifiers such as SVM, Logistic Regression, and tree models such as Decision Tree, Random Forest, Gradient Boosting - to compare their performances and improve existing accuracy.
4.	Social Impact / Customer Satisfaction	The leading cause of death in the developed world is heart disease. Therefore, there needs to be work done to help prevent the risks of having a heart attack or stroke.
5.	Business Model (Revenue Model)	Key Partners: 3rd Party Applications, foundations, Govt. Agencies Cost Structure: Tech, Investment (fixed)

		<p>Revenue Streams: public and private contracts</p> <p>Customer segments: Middle aged people, older adults, patients already diagnosed with heart diseases or related illnesses</p> <p>Customer Relationship: Customer support, exclusive channels</p> <p>Customer channels: website, chatbot</p> <p>Value proposition: User friendly detection tool to detect heart diseases at the comfort of one's home</p> <p>Key Activities: Attracting new customers, retaining old ones, providing support, updating and maintaining data, platform development and maintenance</p> <p>Key Resources: Digital platform, loyal customer base, dedicated team</p>
6.	Scalability of the Solution	<p>There are 2 different ways to accomplish scaling for the proposed solution - Horizontal & Vertical scaling. This solution can be vertically scaled with increasing the capacity of existing dataset with no change in the code.</p> <p>In terms of horizontal scalability, the proposed model can be scaled wider to deal with the traffic. This can be done by increasing the GPUs (Graphical Processing Units) & TPUs (Tensor Processing Units) and working together as a single logical unit for faster access.</p>