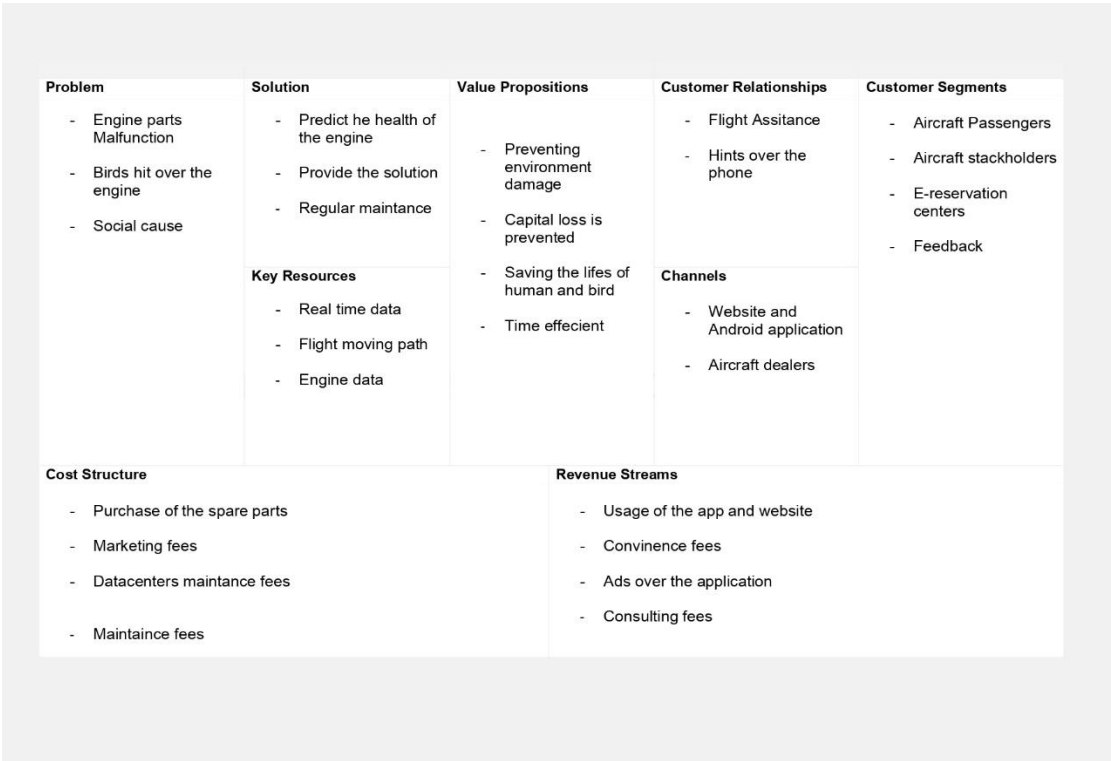


## Project Design Phase-I Proposed Solution

Team ID	PNT2022TMID45954
Project Name	Project - Machine Learning-Based Predictive Analytics for Aircraft Engine

### 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)	There can be many reason to cause a failure in a aircraft engine, the main aim of the project is to find a effective solution for the cause of the failure and prevent it to increase the life of the engine for certain years.
2.	Idea / Solution description	The main aim of the project is to predict the failure of the engine by taking the information and parameters and test them using machine learning to save time and money to increase the productive.
3.	Novelty / Uniqueness	Suggestion of prevention measures for the engine failure while comparing with the threshold values of various parameters that are involved in predicting the engine health and state.
4.	Social Impact / Customer Satisfaction	As a failure of the engine, there can be danger in the plain.to avoid this we can previously predict the status of the plain and apply the solution to it. By this we can save the life of the people who are on board. when a plane crash there is pollution in the environment like when we need to evacuate the plain in the forest trees are getting Destroyed and the plane is fired when crashed. Due to high-speed jet engine in the plane bird are getting extinct species they get into the engine and cause failure.
5.	Business Model (Revenue Model)	 <p>The Business Model Canvas for the project is as follows:</p> <ul style="list-style-type: none"> <li><b>Problem:</b> <ul style="list-style-type: none"> <li>- Engine parts Malfuction</li> <li>- Birds hit over the engine</li> <li>- Social cause</li> </ul> </li> <li><b>Solution:</b> <ul style="list-style-type: none"> <li>- Predict he health of the engine</li> <li>- Provide the solution</li> <li>- Regular maintance</li> </ul> </li> <li><b>Key Resources:</b> <ul style="list-style-type: none"> <li>- Real time data</li> <li>- Flight moving path</li> <li>- Engine data</li> </ul> </li> <li><b>Value Propositions:</b> <ul style="list-style-type: none"> <li>- Preventing environment damage</li> <li>- Capital loss is prevented</li> <li>- Saving the lifes of human and bird</li> <li>- Time effecient</li> </ul> </li> <li><b>Customer Relationships:</b> <ul style="list-style-type: none"> <li>- Flight Assitance</li> <li>- Hints over the phone</li> </ul> </li> <li><b>Channels:</b> <ul style="list-style-type: none"> <li>- Website and Android application</li> <li>- Aircraft dealers</li> </ul> </li> <li><b>Customer Segments:</b> <ul style="list-style-type: none"> <li>- Aircraft Passengers</li> <li>- Aircraft stackholders</li> <li>- E-reservation centers</li> <li>- Feedback</li> </ul> </li> <li><b>Cost Structure:</b> <ul style="list-style-type: none"> <li>- Purchase of the spare parts</li> <li>- Marketing fees</li> <li>- Datacenters maintance fees</li> <li>- Maintaince fees</li> </ul> </li> <li><b>Revenue Streams:</b> <ul style="list-style-type: none"> <li>- Usage of the app and website</li> <li>- Convience fees</li> <li>- Ads over the application</li> <li>- Consulting fees</li> </ul> </li> </ul>
6.	Scalability of the Solution	The solution of the project “Machine Learning-Based Predictive Analytics for Aircraft Engine” is to meet the clients or customers’ requirements