

# **Machine Learning Based Predictive Analytics for Aircraft Engine**

## **Novelty :-**

Suggestion of remedy measures for the engine failure while comparing with the threshold values of various parameters that are involved in predicting the engine state .

## **Feasibility of the project : -**

### **Economical feasibility :**

Since the project mainly focuses on software using sensor and no complicated hardware is required the overall cost doesn't get too high.

### **Technical feasibility:**

Python,Flask ,and many machine learning algorithms are used to build the project and is used to achieve the desired result for the proposed model.

### **Social feasibility:**

A proper management is maintained where the task is split into modules and given to individuals or teams based on their area of expertise.

### **Scheduling Feasibility:**

Agile methodology is used and the project is scheduled and the process is monitored regularly within weeks.

### **Operational Feasibility:**

The proposed solution solves the problem by well predicting the failure of engine in prior stages because of the frequent and periodic testing phases.

## **Social Impacts:-**

1. As the failure of a particular engine is previously predicted one could know to not use that specific hardware and this drastically reduces the loss of life if that engine had been used in an aircraft.

2. On encountering a plane crash one could observe the ecosystem surrounding the crash would be seriously affected due to the leakage and various chemical emission .This could be specifically avoided if there had been no crash in the first place.
3. The company manufacturing the engines could face a crash in its sales history.

### Scalability of the solution:-

The solution of the project “Machine Learning Based Predictive Analytics for Aircraft Engine” is flexible enough to meet the clients or customers requirements.

### Bussiness Model

