

Project Design Phase-I
Proposed Solution

Machine Learning-Based Predictive Analytics for Aircraft Engine

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	How might we help the Flight Safety Officer who wants to improve the engine reliability and flight safety by using a predictive analysis to replace vulnerable components.
2.	Idea / Solution description	Collect extensive data on working of engines, develop a Machine Learning Program and train it with failure data generated through a simulation model. The program would then predict on the working of the engine.
3.	Novelty / Uniqueness	Identifying interdependencies between component which would result with the most economical solution.
4.	Social Impact / Customer Satisfaction (<i>FLIGHT SAFETY OFFICEER</i>)	The Flight Safety Officer is now able to <i>avoid</i> Engine failure instead of solving the failure after it occurs. Accurate results as a machine can analyse extensive amount of data. The customer is able to produce Engine Assurance quickly.
5.	Business Model (Revenue Model)	The materials, cost of resources and our initial investments are negligible.
6.	Scalability of the Solution	The solution is highly scalable, it can accommodate a large set of data for any type of engine.