

## Ideation Phase

### Problem Statements

Date	30 September 2022
Team ID	PNT2022TMID21701
Project Name	Predictive Analytics for Aircraft Engines
Maximum Marks	

#### Problem Statement :

Engine failure is very dangerous and requires significant time for repair. Loss of time and money results from an unexpected failure. Time, effort, money, and occasionally even lives can be saved by predicting failure beforehand. Installing the sensors and monitoring the values will allow you to find the failure. Any equipment can have predictive maintenance and failure detection, but we'll be dealing with engine failure for a predetermined period of days.

The project's goal is to use machine learning to detect an engine breakdown, saving time and money while increasing production.

#### Customer Problem Statement :



<b>Problem Statement (PS)</b>	<b>I am (Customer)</b>	<b>I'm trying to</b>	<b>But</b>	<b>Because</b>	<b>Which makes me feel</b>
PS-1	an aircraft engineer	predict aircraft engine failure	it is not certain	there are a lot of variables and factors to account for	Irritated
PS-2	a maintenance staff	predict remaining usable life of an Aircraft Engine	it has many key parameters like Temperature, Pressure, etc	it is a complex system	Confused
PS-3	an aircraft company	increase the reliability of aircraft components and systems	scheduling and maintenance has high operations cost	aircraft components and maintenance staff is high - cost	anticipated