

# PROBLEM SOLUTION FIT

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TEAM ID	PNT2022TMID31107
PROJECT TITLE	Machine Learning-Based Predictive Analytics for Aircraft Engine
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<b>1.CUSTOMER SEGMENTS</b> Customers are businessmen, student, tourist, traveler and all the people traveling in flight.	<b>4.CUSTOMER LIMITATIONS</b> Customers require accurate and early predictions of the flight engine failure. And they also look for an alternate solution.	<b>5.AVAILABLE SOLUTIONS</b> The reliability analysis of aircraft engines is essential for ensuring the smooth functioning of each component of an aircraft engine.
<b>2.PROBLEM</b> Engine failure occurs when a turbine engine unexpectedly stops producing power due to malfunction. This lead to a lot of customer dissatisfaction.	<b>6PROBLEM ROOT / CAUSE</b> The root cause of the problem is unforeseen & unpredictable engine failure that cause cancellations and arrival, departure delays.	<b>7.BEHAVIOR</b> The purpose of this research is to develop methods that can be used to generate reliable and timely alerts
<b>3.TRIGGERS TO ACT</b> To accurately predict the failure of an engine and track the flight. <b>4.EMOTIONS</b> The aircraft engine failure occurs, passengers often get annoyed and frustrated. They also might lose to reach on time to some important occasions.	<b>10. SOLUTION</b> Preventable fuel problems such as exhaustion. Structural failures where a broken connecting rod, crank, valve, or camshaft is present account for seventeen percent of engine failures occurs.	<b>8.CHANNELS OF BEHAVIOR</b> Check the engine regularly and maintained properly. And also check the fuel and oil levels regularly in the aircraft engine.