

Project Design Phase-I - Solution Fit

Project Title: Machine Learning-Based Predictive Analytics for Aircraft Engine **Team ID:** PNT2022TMID45954

1.CUSTOMER SEGEMENT(S) Customers are the common people and business officials and leaders.	6.CUSTOMER CONSTRAINTS When they are aware of the engine health, they can predict the travel according to it. So, that they won't miss any event.	5.AVAILABLE SOLUTION The analysis of aircraft engines is essential for ensuring the smooth functioning of each component of an aircraft engine.so that they can prevent engine failure.
2.PROBLEMS Engine failure occur when a natural calamities like turbulence or high-density cloud which can cause a damage to the propeller and make the engine to fail.	9.PROBLEM ROOT CAUSE The root cause of the problem is no proper maintenance of the engine component and not replace on time. Due to which late arrival and cancelling of the flight.	7.BEHAVIOUR The purpose of the development is to find a proper solution and alert the system on time without any delay.
3.TRIGGERS The customers can predict the failure of the engine and come to a conclusion of the engine health of the flight.	10.YOUR SOLUTION Prevention of the fuel exhaustion and any structural damage like propeller, rod, crank shaft, rotor, fuel injector, spark-plug etc., health of these component can be monitored	8.CHANNELS of BEHAVIOUR Proper check in engine oil and fuel and replacement of the parts regularly.
4.EMOTIONS When there is an engine failure, they have to sacrifices the important events which is connected to them emotionally. Where they get annoyed and frustrated and cannot go on time to the destination.		