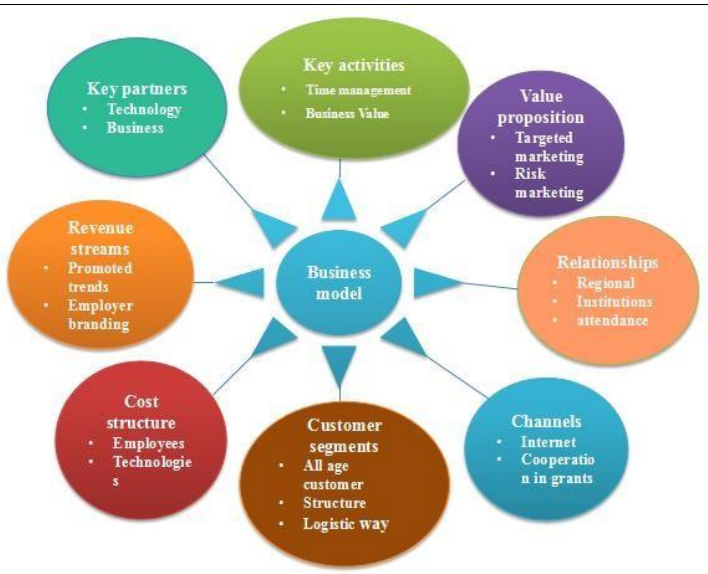
Project Design Phase-I
Proposed Solution

Date	26 September 2022
Team ID	PNT12251658379233
Project Name	Developing a Flight Delay Prediction Model using Machine Learning
Team Leader	Preethi S
Team Members	Madhubala A , Rohini S, Akshaya S

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	**Problem Statement (Problem to be solved)**	Developing a flight delay prediction model,
2.	**Idea / Solution description**	The main objective of the model is to predict flight delays accurately in order to optimize flight operations and minimize delays. Using a machine learning model, we can predict flight arrival delays. The input to our algorithm is rows of feature vector like departure date, departure delay, distance between the two airports, scheduled arrival time etc. We then use decision tree classifier to predict if the flight arrival will be delayed or not. A flight is considered to be delayed when difference between scheduled and actual arrival times is greater than 15 minutes. Furthermore, we compare decision tree classifier with logistic regression and a simple neural network for various figures of merit.
3.	**Novelty / Uniqueness**	Object detection using **Deep Learning.**

4.	**Social Impact / Customer Satisfaction**	By predicting the flight delay with more accuracy, the optimised results will help the passengers by alerting them, which will not lead them to miss the flight. In the case of the medical field, if a doctor misses a flight, it can cause issues in the life or health of a patient. Our project helps them to stay aware of their flights.
5.	**Business Model (Revenue Model)**	
6.	**Scalability of the Solution**	This makes the passengers to take preventive action when the status of the flight is notified and this improves the business value of the passengers, time management, and more.