Problem statement

A country's airport determines the stay and luxury that the country provides. Having a high functional airport determines the quality & planning efficiency of the country.

Who does the problem affect?	Passengers, Ground staff, Airport employees,
What are the boundaries of the problem?	Duty free, arrivals, departures, gates, washrooms, Cafeteria, lounges
What is the issue?	1. Sometimes the gates & cargo belts are not efficiently utilised leading to crowding and losing bags. 2. Washrooms are not being cleaned enough whereas other less used washrooms are cleaned more. 3. The nearest gates are not assigned based on the given runway.
When is the issue occurring	The issue occurs when efficient planning is not done and the data is not being analysed based on usage.
Why is it important that we fix the problem?	To increase hospitality and to boost tourism. To give the travellers a smooth journey. To utilise the country’s finance and improve the economy.

AIRLINES DATA ANALYTICS FOR AVIATION INDUSTRY

What is the Data Analytics?

Data analytics is the science of analyzing raw data to make conclusions about that information

Data analytics help a business optimize its performance, perform more efficiently, maximize profit, or make more strategically-guided decisions.

Various approaches to data analytics include looking at what happened (descriptive analytics), why something happened (diagnostic analytics), what is going to happen (predictive analytics), or what should be done next (prescriptive analytics).

Why do we use Data anlaytics?

1. It helps businesses optimize their performances
2. companies can help reduce costs
3.Analyze customer trends and satisfaction
4. Product Development
5. Industry Knowledge

Data analytics is important because it helps businesses optimize their performances.

Implementing it into the business model means companies can help reduce costs by identifying more efficient ways of doing business and by storing large amounts of data.

How do we use Data Anlaytics in Aviation Industry?

1. Airport resource usage optimisation and maintenance
2. Non–aeronautical revenue intensification
3. Passenger experience maximisation.
4. Optimising flight paths and rescheduling routes in real-time
5. Achieve optimum utilisation of ground services

What is Agile methodologies?

- Agile methodologies are a set of frameworks that help manage projects in an iterative fashion.
- These methods focus on communication and getting products out there, instead of spending months on gathering requirements.

Usage in Aviation industry?

1. Used to design well-defined steps with no project stages overlapping.
2. Assigning tasks are made easier.
3. Used for breaking the requirement into simpler chunks brings more clarity to the use case.
4. Used for documenting and sharing user stories with everyone through agile boards.

What is regression?

- Regression Analysis is a statistical process for estimating the relationships between the dependent variables or criterion variables and one or more independent variables or predictors.
- Regression analysis explains the changes in criteria in relation to changes in select predictors.

Usage in Aviation industry?

1. Predicting the weather forecast
2. Predicting delay in flights