

# **Airport Data Analysis**

## **Architecture**

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# **INFORMATION**

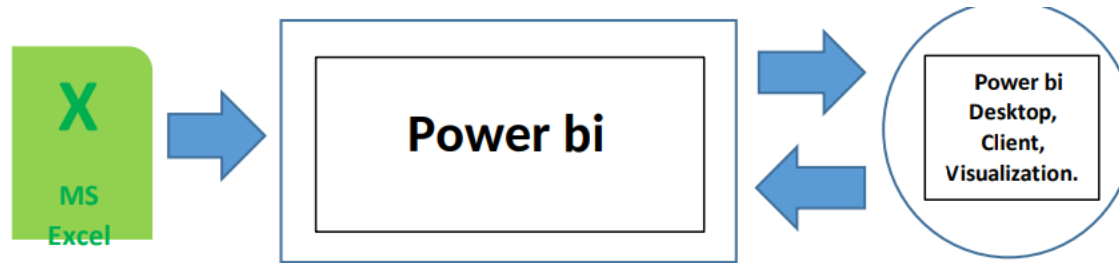
The Airport Data Analysis Dashboard project aims to provide insights into flight destinations, busy and lengthy routes, and meaningful relationships between attributes. The dashboard will be developed using Power Query Editor for ETL(Extract, Transfer, and Load) and Power BI for interactive visualizations.

# **Scope**

The project will analyze flight routes and related metrics using an airport dataset. The analysis will focus on flight counts, distances, delays, and status. The dashboard will not include real-time data or operational functionalities.

# Architecture

The architecture of the entire project is shown below:



- Our entire data source is our Excel file. This Excel file is connected to the Power BI server. From the server, data can be shown and accessed.
- Power BI server has various architectural components regarding solving the query.
- The functionalities show the result according to a query entered by the end-user or client.
- Screen of Power BI desktop, client, and various charts and dashboard (screen) of Power BI are present on the client side.
- The client entered the query to show the graph, after selecting the data in the form of rows and columns it will go inside the Power BI server.
- In the Power BI server, it understands the query generates the best-recommended charts based on selected data, and returns it to the Power big screen. Based on recommended charts, the client can make the visual aspect of the same.
- If the client is not satisfied with the result, he/she has to select data accordingly otherwise make the required changes to show the expected result.

# **Deployment**

- The dashboard will be deployed on a web-based platform, accessible to relevant stakeholders for analysis and decision-making.
- There are multiple ways to deploy the dashboard in Power BI. The simplest way is to save directly on Power BI service from online mode.
- One can easily save the work from the desktop and then it will open in the browser, the user has to sign in and the work will be saved. This work can see all the viewers around the world.
- You can share it via a sharable link. Thus, user can deploy a dashboard using Power Bi