POWER BI

Case Study

Data Set

The dataset that you will be using today is Aircraft data.

Business Case

Delta Fast is an emerging start-up company operating in the business of manufacturing and assembling of commercial aircrafts. The company is quite new having completed about 2 years in the industry. The top management has decided to have a high level meeting on the budgeting for next year wherein they have invited all the directors to present the areas of investment in the upcoming financial year and provide a strong justification on the same.

As a director, you are expected to analyse the available airlines data covering their operating costs, number of orders etc. and design a dashboard using PowerBI to present the following:

1. Determine the Orders for different Aircraft types and analyse Total Cost.
2. Top 5 Airlines that have the potential of maximum revenue generation.
3. Analyse the Total FreightIn, FreighOut, PassengerIn, PassengerOut for getting deeper insights to achieve business profitability

Business Questions and Tasks

Task1 : Import all the Data

i)   Import all the data from the Airlines folder.
ii)   From **AircraftType** query, remove the extra columns at the end.

Task2 : Data Preparation

i)   In the **Airline** query, make first row as header.
ii)   In the **OrderCost** query, replace Null with 0.
iii)   In the OrderCost query, change the datatype of Total Cost to Fixed Decimal Number.
iv)   In the **Airline_port_country**, split the **Airline** column.
v)   Close and Apply to load the data in Power BI.

Task3: Inspect the relationship of the data in Data Model tab.

Task4: Analyze the data using visualizations

i)   Create a bar chart to analyze Orders by various Aircraft types.
ii)   Create a stacked area chart to show the total cost incurred by various Airlines. Which Airline is incurring the highest cost?
iii)   Show the yearly trend of Freight In information for different airlines.
iv)   What is the total number of orders? Create a card visual to show the same. Add a border and a title **Total Orders** to the card visual.

Task5: Add a user interactive filter, slicer for Aircraft Type

i)   Add a slicer for **Aircraft Type** so that the users can slice the report according to their selections.

ii)   In the slicer, also add **Select All** option.

Task6: Top 5 Airlines by Total Cost

i)   Help the business identify top 5 Airlines by Total Cost

Task7: Count of Airlines in different countries

i)   Create a map visual to show the count of airlines for different countries.

Task 8: Analyzing Busiest Port

i)   Create a calculated measure Total_In_Out to calculate the total number of IN and Out for the ports.

ii)   Create a matrix visual to show the Total Ins and Outs for different ports.

iii)   Add %GT of Total_In_Out in the matrix visual.

Task 9: Analyzing Freight_Out

i)   Create a calculated measure to get the variance of Freight_Out

ii)   Create a gauge chart to show the Freight_Out variance.

iii)   Give a title **Freight_Out Variance** to the visual.

Task 10: Formatting report.

i)   Add a page title **Executive Summary Report.**

ii)   Align the visuals as shown in the below screenshot.