Project 04 - Build Dashboards using Tableau

TOPIC: CANCELATIONS AND FLIGHTS DELAYS

Saksham Taneja

BASIC DESCRIPTION

This project is a tableau project where the dataset was chosen is a flight delay and here we have made 3 insights based on the data given

In the tableau, I have created sheets, dashboards that tell about the visualization of data and tell the story

· Dataset Link: [Flights Delays and Cancelations](https://d17h27t6h515a5.cloudfront.net/topher/2017/December/5a3b1fad_flight-delays/flight-delays.zip)  
Lesson Link: [Project description](https://classroom.udacity.com/nanodegrees/nd028/parts/807ffa22-5f88-4057-851f-ef813431a56a/modules/c9fac38f-c95a-4a04-b078-0436706d63b4/lessons/d4f64f47-2587-47d5-979e-4eda41cf33d4/concepts/f2b65374-af64-46ff-92e5-04a673c5fd43)

# **1.** **Insight I: Total delay of Airline**

SUMMARY: this graph on tableau shows the visualisation about the questions “Total delay in Airline (in minutes)”

To do this i have done some steps in tableau i.e data of flights and airline files (key airline )

This created a field called Total delay *( Total Delay —— (Arrival Delay)+[Departure Delay)).*

When analyzing I found that SothWest airline company has highest delay and *Hawaiian Airline Inc. is* the company with the lowest delays

DESIGN: here i have chosen horizontal chart which i find suitable for this data and it is much self-explanatory where it shows airline and minutes

I have chosen an orange colour as it attracts ad also helpful for people

·  [Link:](https://public.tableau.com/profile/saksham.taneja#!/vizhome/TotalAirlineDelay_15904296747610/TotalAirlineDelay)

· <https://public.tableau.com/profile/saksham.taneja#!/vizhome/TotalAirlineDelay_15904296747610/TotalAirlineDelay>

# **2.** **Insight II: Reasons for flights delays of Airlines over Time**

SUMMARY: this graph on tableau shows the visualisation about the questions “Reason of flights delays (min) of Airlines over Time(months)”

This graph tells us to plan and execution in order to increase the productivity of any airline and decrease delays.

· DESIGN:I have joined the flights and airlines files in tableau. For this plot, I put the months as rows, the minutes as per measure name (late aircraft delay, security delay, airline delay, air system delay, and weather delay) as columns and the months as filters. For this plot, we can select the months and quickly see the total delay of flights of each reason according to the [dataset.](https://www.kaggle.com/usdot/flight-delays/data#flights.csv)

I have chosen Density as a stacked chart to visualize this Insight II because this graph is suitable for exploring the trend over time for more than two variables.

· the plot colour is orange only in order to avoid distractions

· [Link:](https://public.tableau.com/profile/saksham.taneja#!/vizhome/TotalAirlineDelay_15904296747610/ReasonsofFlightDelayminsofAirlinesovertimemonths?publish=yes)

·<https://public.tableau.com/profile/saksham.taneja#!/vizhome/TotalAirlineDelay_15904296747610/ReasonsofFlightDelayminsofAirlinesovertimemonths?publish=yes>

# **3.** **Insight III: Multiple graphs of delay per airline**

Analysis includes

* Total airline delay.
* Reason of flight delay of the airline over time.
* Average departure delay VS average departure time (min) over months per airline.
* Cancelled flights per airline.

SUMMARY: the visualization includes 4 analysis stated above have been put over the dashboard

The dashboard Analysis of delay of airlines have been made

DESIGN: I have used orange and blue colour so that it looks good to eyes and also for people who have colourblindness will get help

[LINK](https://public.tableau.com/profile/saksham.taneja#!/vizhome/TotalAirlineDelay_15904296747610/AnalysisofdelaysonAirlines?publish=yes)  
<https://public.tableau.com/profile/saksham.taneja#!/vizhome/TotalAirlineDelay_15904296747610/AnalysisofdelaysonAirlines?publish=yes>

# **4. REFERENCES**

* Video tutorial by udacity
* Resources by Udacity
* Dataset Given with description
* Tableau community
* Mentor forum of Udacity
* Google.com

# **5. Screenshots**



