

Flight data visualization using Tableau

Link of the story:

https://public.tableau.com/profile/adi.alageel#!/vizhome/FlightDelayVer9_16060380960330/Story1

Summary

In this project we want to clarify the delay and the cancelation of flights in which airports and which carriers in USA. And I created 4 dashboards that will answers the below questions(I got the dataset from Udacity web site) :

Insight 1:

What are the percentages of flight delays or cancelled/diverted arrivals and Which months had the highest flight delayed or cancelled, and which carrier types and airports?

Answer: We can notice from the figure that the average delay (based on carriers) are in all USA, but what we can say is that the Southwest Airlines Co.in has most delayed then it followed by American Airline. From the map you can click and see that Chicago has the highest delay.



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[Dashboard 1](#)

Insight 2:

Find the carriers that have the most delays and what are the airports with different carrier?

We can notice that the average delay (based on carriers) are in all USA, but what we can say is that the Southwest Airlines Co.in has most delayed then it followed by American Airline. From the map you can click and see that Chicago has the highest delay.

We can see that if we take all years and carriers the airport causes the most delay is Chicago then Atlanta.

We can also see if the carrier is Virgin America then San Francisco caused the most delay with Los Angeles

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Insight 3:

Find the airport that caused the most delays with specific carrier:

We can see that if we take all years and carriers the airport causes the most delay is Chicago then Atlanta.

We can see if the carrier is Virgin America then San Francisco caused the most delay with Los Angeles

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Insight 4:

What are the highest 10 airports and carriers that causes the delays, also what will happen if we combine them together?

When we take the highest 10 delayed airports and carriers we can notice that the Southwest become the 4th position and ExpressJet will be the highest one instead, which mean most delay of Southwest Airport spreaded in all airports. After clicking southwest we can see the highest airport caused the delay is Chicago

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Design:

For insight 1:

I used carrier name and measure names in column, Measure Values as Row to help me to understand the reasons of delay for example the weather delay is 0.017(1.7% of the total delays)

For insight 2:

I used map (from show me) to find the Flights that have the highest number of delays in which states and airport.

For insight 3:

Here I used all delays with airport name (in worksheet named By Airport) to help me to see which airport has the highest delays for example (the highest one is Chicago with 124,652).

For insight 4:

I used Carrier Name, Top 10 delays with the year (you can check in worksheet that I call it Highest 10) to find which airlines has the highest number of delays which was ExpressJet Airlines with 92,023 delays

Reference:

<https://classroom.udacity.com/nanodegrees/nd098-mena-connect/parts/df391ded-b71e-4533-9250-f3015f12aa1d/modules/a307090c-34a3-4f04-9389-8cf1c8bfb1df/lessons/6db9dcaf-3564-4e39-83c9-d57223c49863/project>