Project (3)

Data dash board project

Insight(1)

Question:

What is the best airline and the worst referring to cancellation of flights and different types of delays (departure, arrival and airline delays)?

https://public.tableau.com/views/project3_1_2_16521412917180/typesofdelays?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

- from this dash board, we find that the most cancellation occurs in WN airline, the least in HA airline.
- WN is the most delaying air line in all types of delays
- VX is the lowest air line in arrival and departure delay, while HA is the lowest in the airline delay
- The most common type of delay is departure delay, then arrival delay with a small difference and at last airline delay

Design :

- This dash board has three bar visualizations, as they compare multiple variables(airlines) with different measuring variables.
- In the first two sheet You may filter different measuring values(I selected departure delay, arrival delay, airline

delay) and airlines, if you want to track a certain airline with certain measuring values

- In the last sheet you can filter the airlines only
- In the first sheet the measuring values are marked with colors to vary between each measuring value and other, I used color blind friendly pallet to be friendly for all users , while in the second and third sheet are in blue as the air lines are labeled

Insight(2)

Question:

What is the percent of each cancellation reason, are they affected by the month or the day of the week?

https://public.tableau.com/views/project3_2_2_16521416616030/Story1?:language=en-US&:display_count=n&:origin=viz_share_link

- From this story we find the most reasons of cancellation is the weather with about 54% , then the airline carrier with 28.4% then the national air system with17.5%
- Cancellation due to weather increases highly in February and decrease more than the other reasons in July, August September ,may be because this is summer

Design :

- I used a pie chart marked with colors as there is ordered multiple variables, and you can filter them
- The second and third charts show the effect of month or day of the week on each reason of cancellation, I used a time line chart and each reason is marked by color to compare the three reasons with time, you can filter the cancellation reason, I used color blind friendly pallet to be friendly for all users

Insight(3)

Question:

What is the distribution of air flight cancellation among states?

https://public.tableau.com/views/project3_3_2_16521419300550/Dashboard1?:language=en-US&publish=yes&:display_count=n&:origin=viz_share_link

- From this dash board we see the counts of flight cancellation distributed among the states on a map
- We find that the most state in flight cancellation is California with 33331 cancellation and the lowest is American Samoa(AS) with 2 cancellations only

Design

- I used a Map because I had to plot geographical data "States". So I thought a Map would be the best visual for this purpose.
- I used a sequential blue color for the states. The darker the blue color, the more is the number of flight cancellations. This type of coloring makes it easier to spot which states have high/low cancellations.

- you can filter the states or the measuring values in order to track what ever specific data you need
- The second is a bar chart to compare the difference in cancelations between the states, they are all in blue as they are identified by labels

Resources:
https://www.youtube.com/watch?v=9xqHA732LMA
https://kb.tableau.com/articles/howto/renaming-cluster-partitions
https://help.tableau.com/current/pro/desktop/en-us/clustering.htm#create-clusters