Summary - Air Line Safety Infographics

Madhuri Basava

Bellevue University

Applied Data Science DSC680

Professor Catherine Williams

Madhuri Basava
07/25/2024
Applied Data Science
DSC680-T302 (2247-1)

Air Line Safety Infographics Summary

Infographics are nothing but information along with graphs. I have created 6 different graphs to depict that Airline safety has improved over the past few years.

Below are the charts I created related to airline incidents over the last 5 years:

Chart 1 - Bar chart:

Sum of Fatalities by Year
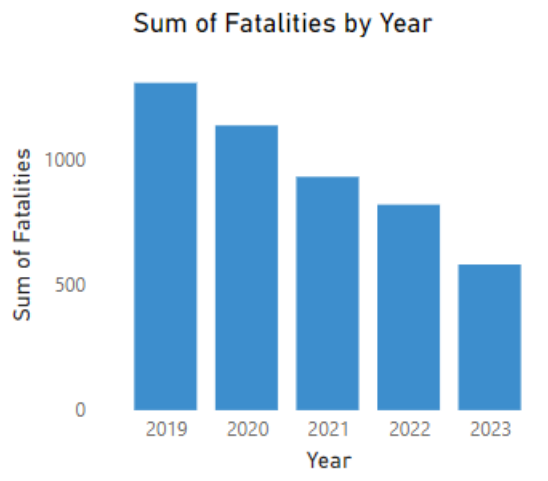
The above Bar graph shows that the number of fatalities was more than 1300 and has decreased over the years to less than 500.

This was possible because of the safety precautions taken to reduce accidents and fatalities.

Madhuri Basava
07/25/2024
Applied Data Science
DSC680-T302 (2247-1)

**Chart 2 - Bar Chart:**

Sum of Fatalities by Route
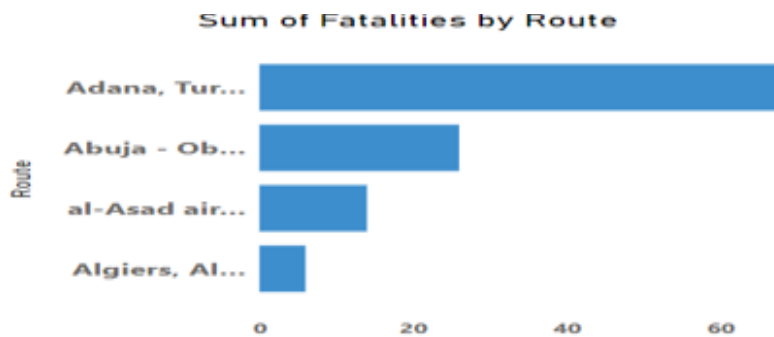
From this graph, we see that the Flight from Adana, Turkey to Balad Airbase, Iraq route has the

maximum number of fatalities. Analysis was done on what needs to be fixed for these routes, and

measures were taken to reduce the fatality rate.

Chart 3 – Pie chart:

Madhuri Basava
07/25/2024
Applied Data Science
DSC680-T302 (2247-1)
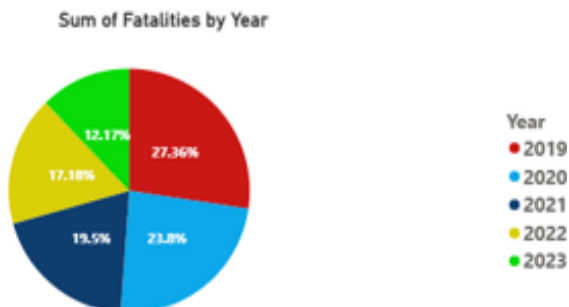
The above Pie chart shows that the number of fatalities was around 27% in 2019 and reduced to

around 12% in 2023, which makes airlines a safer option for travel.

Chart 4 – Donut Chart:
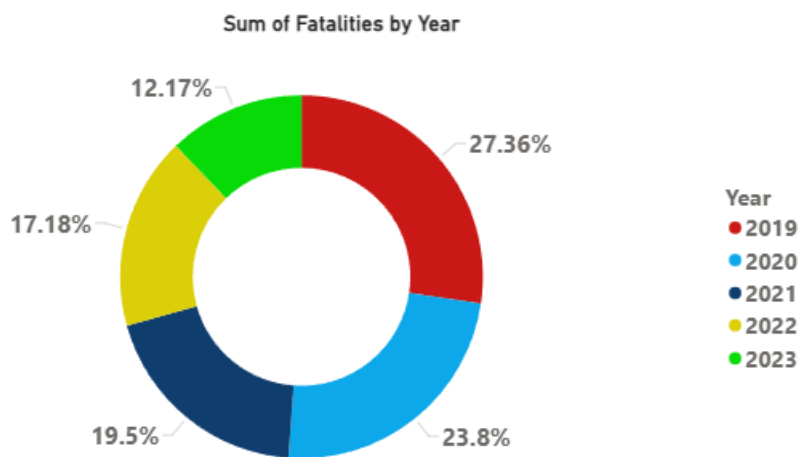
The above Donut Chart shows similar to the above Pie chart, that the number of fatalities was

around 27% in 2019 and reduced to around 12% in 2023. A significant improvement in flight

safety helped the number of fatalities to reduce by 15% in the last 5 years.

I have used different colors for both the Pie chart and the Donut chart to show some variation for

different years.

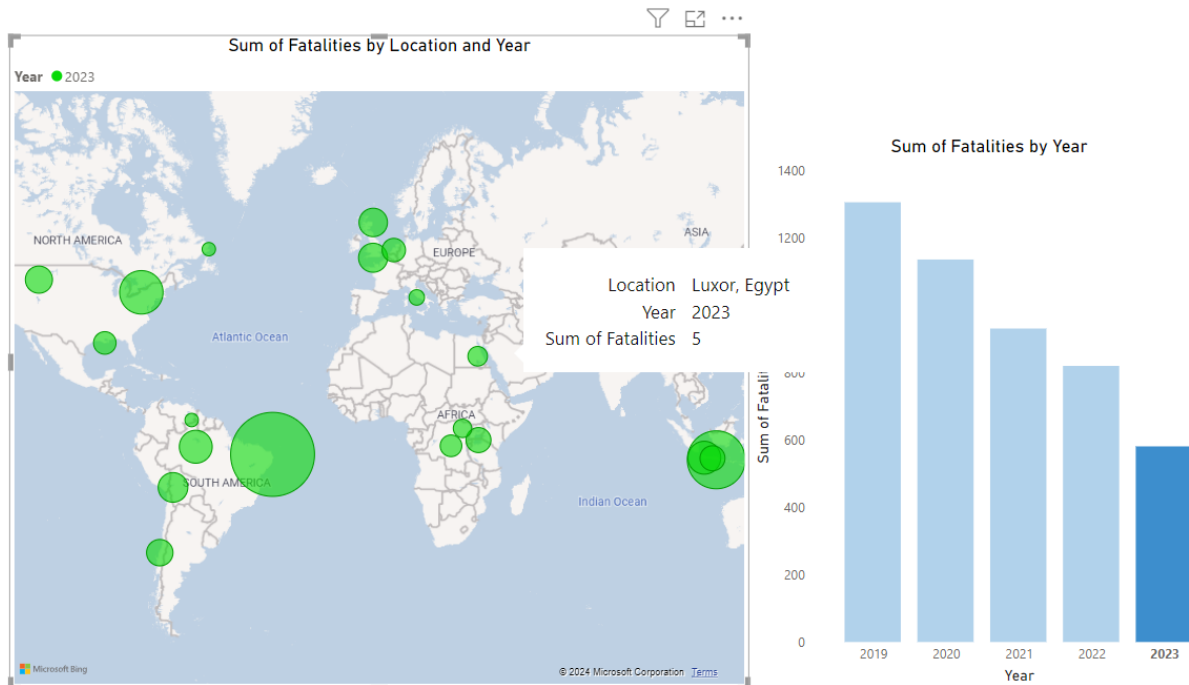**Chart 5 – Interactive Map with Bar chart:**

Airline Fatalities Data
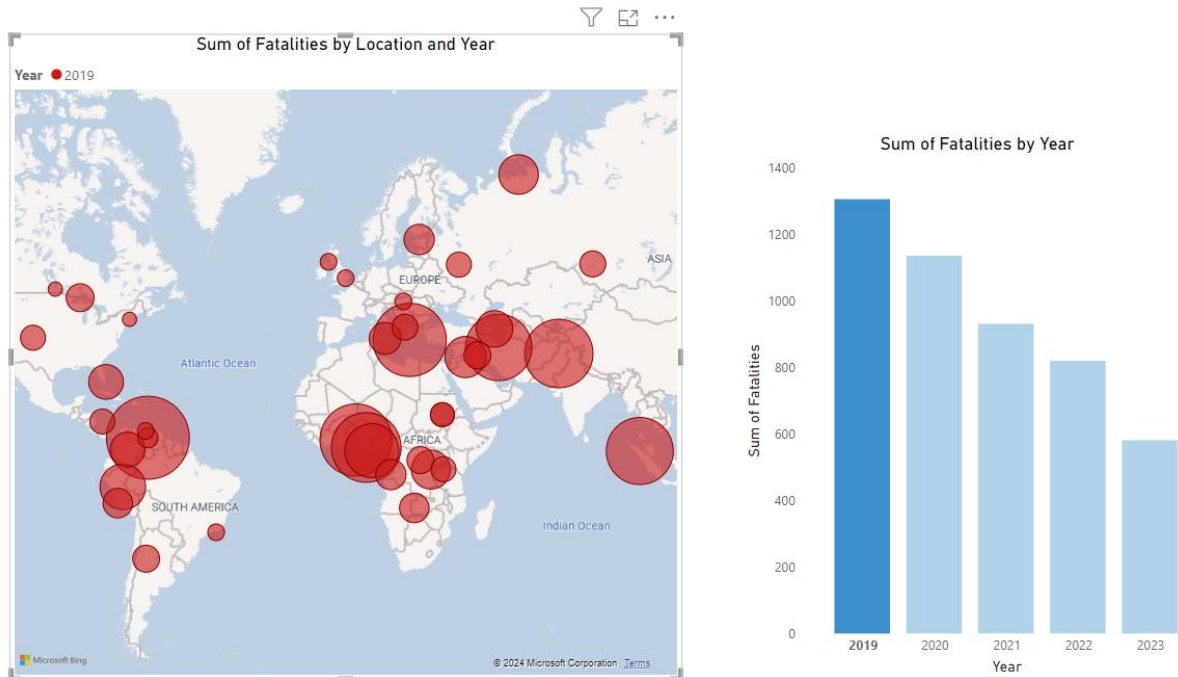
The number of fatalities in the year 2019 is depicted with red dots and the size shows the relative number of fatalities that occurred in various regions.

Chart 6 – Interactive Map with Bar chart:

Madhuri Basava
07/25/2024
Applied Data Science
DSC680-T302 (2247-1)

Airline Fatalities Data

Here the green dots show the number of fatalities in various regions for the year 2023, where we see the amount and size of the green dots are drastically reduced when compared to the red dots in the chart for 2019. Also, if we hovered over the dots, it shows the information on a particular location, and how many fatalities occurred for that year. Also, the right-side bar chart clearly shows the decrease in fatalities each year.

Focus on External Audience

The internal audience may have familiarity with the data and may be well-versed in technical or domain-specific terms but for the Public, it should be more intuitive and easily understandable. While preparing this I made sure not to overwhelm the audience with excessive detail and focus

on only presenting the most important information. I ensured that Visualizations shared with the

public need to be mindful of privacy concerns and should avoid disclosing personally

identifiable information or sensitive data without proper consent.

Ethical Considerations

Overall, ethical considerations are integral to ensuring the safety and well-being of all

stakeholders involved in airline operations. By prioritizing safety, transparency, accountability,

and continuous improvement, airlines can maintain the highest ethical standards and the trust and

confidence of the individuals. Ethical considerations extend beyond safety to encompass broader

societal concerns. Airlines should consider their impact on communities, economies, and the

environment and take proactive measures to fulfill their corporate social responsibility

obligations.

Conclusion

From the above graphs, we can conclude that airline incidents are getting reduced over time So,

it is safe to travel in Airlines.

References

- *The Airline Crashes dataset is retrieved from the Kaggle website:*

  Airplane Crashes [Data Visualization] (kaggle.com)

Madhuri Basava
07/25/2024
Applied Data Science
DSC680-T302 (2247-1)

- ***Airplane Crashes 1908-2009:*** *[Airplane Crashes 1908-2009 - dataset by hhaveliw | data.world](data.world)*