

Week 3 & 4 Executive Summary

Professor: Dr. Catherine Williams

Data Presentation and Visualization
Term Project Milestone 2 (Week 3&4)

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Introduction

The visualization executive summary report was built for pre-requisite to review internally and start with external communication. This is to provide the facts about the airline travel is safe and there is no adverse impact because of negative publicity made by media that it is dangerous to travel. Especially due to COVID lot of travel industries airline booking and subsequent cancellations are causing airline partners owners the constant headache of losing business.

Abstract

Content published in this executive summary was targeted to the senior leaders, especially for the leaders who care about the portrayal of the industry and their airline specifically. Since we planned for the executives and external communication we wanted to make sure data used being ethical and sharing information is not misleading. This presentation will set the tone and recommendation for how the media is addressed going forward with the information and facts that need to be shared. The executive summary contains the information of the historical data of worldwide airlines and fatal incidents, fatalities happened specific to airlines and in the year, also captured financial data to show that there is not impact on overall profit and public demand to airline travel.

Details of the Executive summary presentation deck.

Slide#1- Highlights of Executive Summary

This slide focus about the abstract of this entire executive summary on what we intended to present to the audience. Also created this slide to give an overall idea to executive about the content of the executive summary presentation.

Slide #2- How safe to travel in Airline?

I made an accident graph merged here with the information for the recent years according to the bureau of Aircraft Accidents to understand the current situation and how the airline industry accidents have been reduced in 2022. This shows how safe to travel in airlines travel is still safest.

Slide #3- Fatal incidents comparison vs recent years?

The purpose of this chart is to compare the airline fatal accidents of different airlines across the world for two different years' groups one is from 1985-1999 and second is 2000-2014.

Slide #4- Summary of air traffic fatalities

I have explained the fatalities caused by air traffic accidents are gone down and its very less in the 20th century (2000-2014) compared to prior years of 19th century(1985-1999) with visuals.

Slide #5- Average fatalities rates and trends?

This slide is intended to provide the average trend is being down towards the recent years of Airlines fatal accidents which is an indication of higher in safety sentiments.

Slide #6- Moving average trend for 5 years.?

This is to prove and to identify the trend direction of average to support and resistance levels.to the executives that airline fatal accidents trend is going down, this chart shows the trend of fatal accidents of airlines from 1985 to 2021 and it clearly shows the trend is downgraded and shown the 5-years moving average and its trend shows the going down in recent years.

Slide #7- Impacts caused by any negative media news?

Since some of the media made negative publicity that air travels are not safe and it is dangerous to travel, to combat such media statements I decided to collect airlines accident data and compare with motor vehicles crashes data to show that the airlines crashes are much less than motor vehicles and airline travel is still safest.

Slide #8- Impacts caused by any negative media news analytical bar charts

Continuation of the above slide given that the chart is being explained further for executives in terms of visuals.

Slide #9- Recommendations to airline industries.

Here with I have included all the charts together and provide some recommendations for the executive person to make further decision making.

Slide #10- Legal & Ethical Considerations.

I have included the legal and ethical considerations of the data obtained here from public domains and was no PII information on it. We are not using any passenger personal information such as address or geo locations to navigate these results. The data considered for the analysis are provided by government for public consumer benefits and executives to make further decisions.

Slide #11- Conclusion

Based on the analysis we were able to we were able to conclude the results and how the industry is safe to travel in the executive for the executive person to make further decisions.

Slide #12- References

I have included all the government and the non-government agency websites for future reference to get more details about this data and it related analytical results of this artifacts used here for the executive person to make further reference.

Conclusion

Based on the about analysis, we were able to clarify and conclude few things:

- Airline travel is still safest way of travel.
- There is no impact on net profit and public demand of air travel is increasing and will improve sales.
- For all passengers the government regulation on seats on an airplane have met strict standards for head-impact safety and durability.
- You are nineteen times safer in a plane than in a car.
- Air travel resulted in 0.07 deaths for every 1 billion miles travelled compared to 212.57 for motorcycles and 7.28 for cars.

How to Present to the external team

Since this presentation does not contain any personal information or the PII data, I can plan for the external audience also my presentation is going to focus on the few subject areas for the executive committee. Subject areas including Airlines economic data is considered to see if there is any impact of overall profit and public demand, Media spreading rumors about airline safety versus data statistics, People's preference for the mode of travels, Airline Revenue and impact due to Covid, operating expenses of the airlines and recommendation to reduce, Legal and ethical disclaimers. Also planning to schedule a meeting in teams with the internal team member to go through the visualizations.

Data Ethics and Legal considerations

- Data obtained here from public domains and was no PII information on it.
- We are not using any passenger personal information such as address or geo locations to navigate these results.
- The data considered for the analysis are provided by government for public consumer benefits.
- There are no private data has been disclosed here and no airline company highlighted.
- Assessing only relevant information required for this analysis.
- Publish and Validating the data with respect to the graph.
- Communicating the results appropriately.
- There are no restrictions to use this data for Analysis and academic purpose.

References:

- <https://cdan.dot.gov/SASStoredProcess/guest>
- <https://www.airlines.org/dataset/world-airlines-traffic-and-capacity-2/>
- <https://www.statista.com/statistics/263443/worldwide-air-traffic-fatalities/#professional>
- https://docs.google.com/spreadsheets/d/1SDp7p1y6m7N5xD5_fpOkYOrJvd68V7iy6etXy2cetb8/edit#gid=1448957446