Week1 & 2 Dashboard Summary
Professor: Dr. Catherine Williams

Data Presentation and Visualization
Term Project Milestone 1 (Week 1&2)

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Due Date: 06/20/2022

Introduction

The visualization dashboard was built for internal communication purpose 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.

Abstract

Due to recent events in the world, the airline industry has taken a major setback on its business. Especially due to COVID lot of travel industries airline booking and subsequent cancellations are causing airline partners owners the constant headache of losing business, however this reduces the airline accidents too in another way. This dashboard considers 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.

Findings

Chart#1- The very first chart I made the Accident Graph for the recent years according to the bureau of Aircraft Accidents to understand the current situation and how the airline industry accidents has been reduced in 2022. This shows how safe to travel in airlines travel is still safest.

Chart#2- Since 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.

Chart#3 – The purpose of this chart is to compare the airline fatal accidents of different airlines across the world for two different year groups one is from 1985-1999 and second is 2000-2014.

This chart shows that the airline fatal accidents are very less in years 2000-2014 when compared to 1985-1999 years. This comparison is by each airline company which shows the downward trend of airlines fatal accidents in recent years (group 2) compared to prior years(group1).

Chart#4- This chart compares the fatalities happened each airline crash and compared against two-year groups.

The main purpose of slide2&3 is to shows that number of fatal accidents and fatalities caused by accidents are gone down recent years and are much safer compared to old years.

Chart #5- To prove 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.

Chart #6- This chart shows airlines fatal accidents trend and fatalities trend from year 1985 to 2020 and it shows that the trend is going down which means the airline travel is still safest option to travel.

Chart #7 – This chart to show the worldwide airlines year over year net profit, its capacity and public demand to air travel.

The airlines year over year net profit chart shows the profit is growing year over in recent years from 2012 to 2019, which signifies that the negative publicity made by media is not negatively affected the overall profit.

The middle chart passengers' average miles year is also increasing year over year that means people are still preferring airline travel and not impact because of negative publicity on their air travel.

The top bar chart to shows year over year airlines available seat multiplied by air miles which is also going upward shows that no impact of bad publicity on air travels.

Based on this analysis, we were able to clarify two things to notice here

1. Airline travel is still safest.
2. There is no impact on net profit and public demand of air travel is increasing will improve sales.

How to Present to the internal team

I am planning to create the presentation out of this results of the visualizations created in Tableau with my observation. Also planning to schedule a meeting in teams with the internal team member to go through the visualizations.

Data Ethics

- Data obtained here from public domains.

- 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

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