

ADV EXP - 6

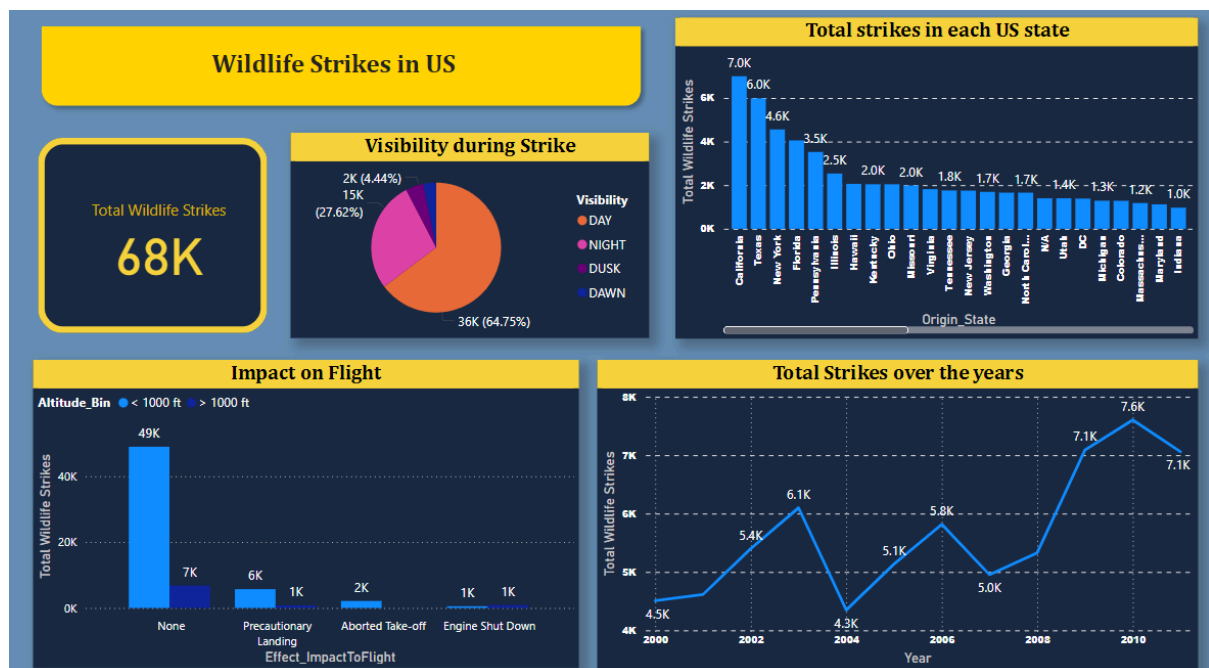
Aim:

To design interactive dashboards using Power BI for visualizing and analyzing an Animal/Wildlife/Marine dataset, employing both basic and advanced charts to uncover insights and trends.

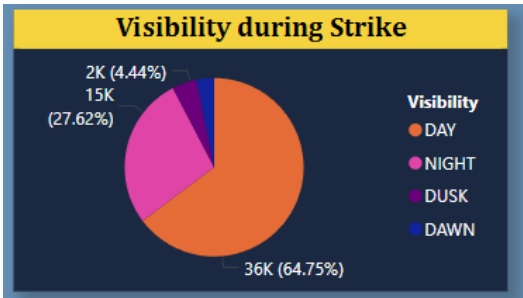
Objectives:

1. To create visually appealing and interactive dashboards that provide insights into the dataset.
2. To explore the distribution, trends, and relationships within the dataset using various types of visualizations.
3. To enable data-driven storytelling by highlighting key patterns, anomalies, and correlations.

Dashboard:



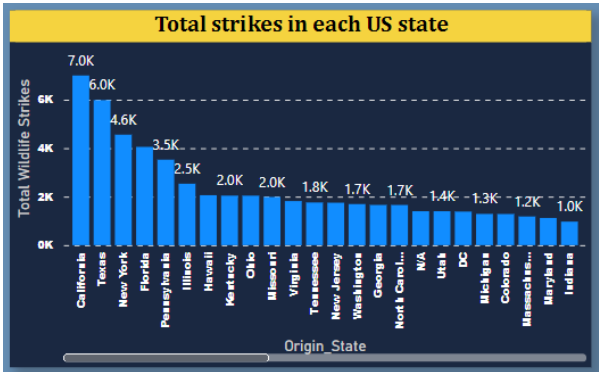
Observations:



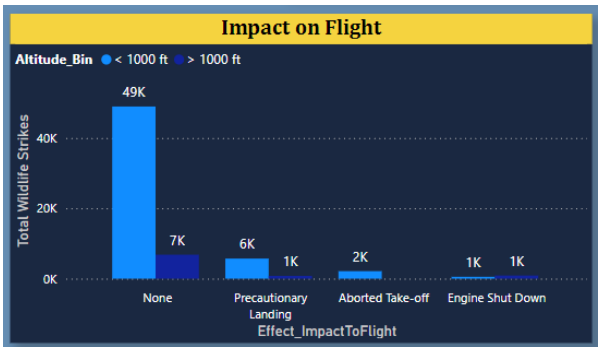
This pie chart illustrates the distribution of wildlife strikes based on visibility conditions during the strike. The majority of strikes (64.75%) occurred during the day, followed by 27.62% at night. Dusk and dawn account for smaller percentages, with dusk at 4.44% and dawn at a negligible portion, indicating lower incident rates during those times.



This card visualization highlights the total number of wildlife strikes recorded, which is 68,000. It serves as a simple yet effective summary of the dataset, providing a quick reference to the overall scale of the incidents.



This bar chart represents the total number of wildlife strikes in each U.S. state. California has the highest number of strikes at 7,000, followed by Texas with 6,000 and New York with 4,600. The distribution shows that a few states account for the majority of strikes, with numbers gradually decreasing among other states, indicating regional variations in wildlife strike occurrences.



This bar chart shows the impact of wildlife strikes on flights, categorized by altitude. The majority of strikes (49K) had no impact on flights, predominantly at lower altitudes. However, few led to precautionary landings, aborted take-off and engine shutdowns. The data reveals that strikes mostly occur at lower altitudes and rarely result in serious consequences for flights.



This line chart displays the wildlife strikes from 2000 to 2010. The number of strikes shows an overall upward trend, with fluctuations. Notable peaks are seen in 2003 (6.1K), 2008 (7.1K), and 2010 (7.6K), while the lowest point occurred in 2004 (4.3K). The increasing trend suggests a rise in wildlife strikes over time, possibly due to environmental or operational factors.