

AVIATION EXPANSION VENTURE RISK ASSESSMENT

NTSB DATA FOR LOW RISK AIRCRAFT PROCUREMENT

PRESENTED BY; KEVIN KISENGU

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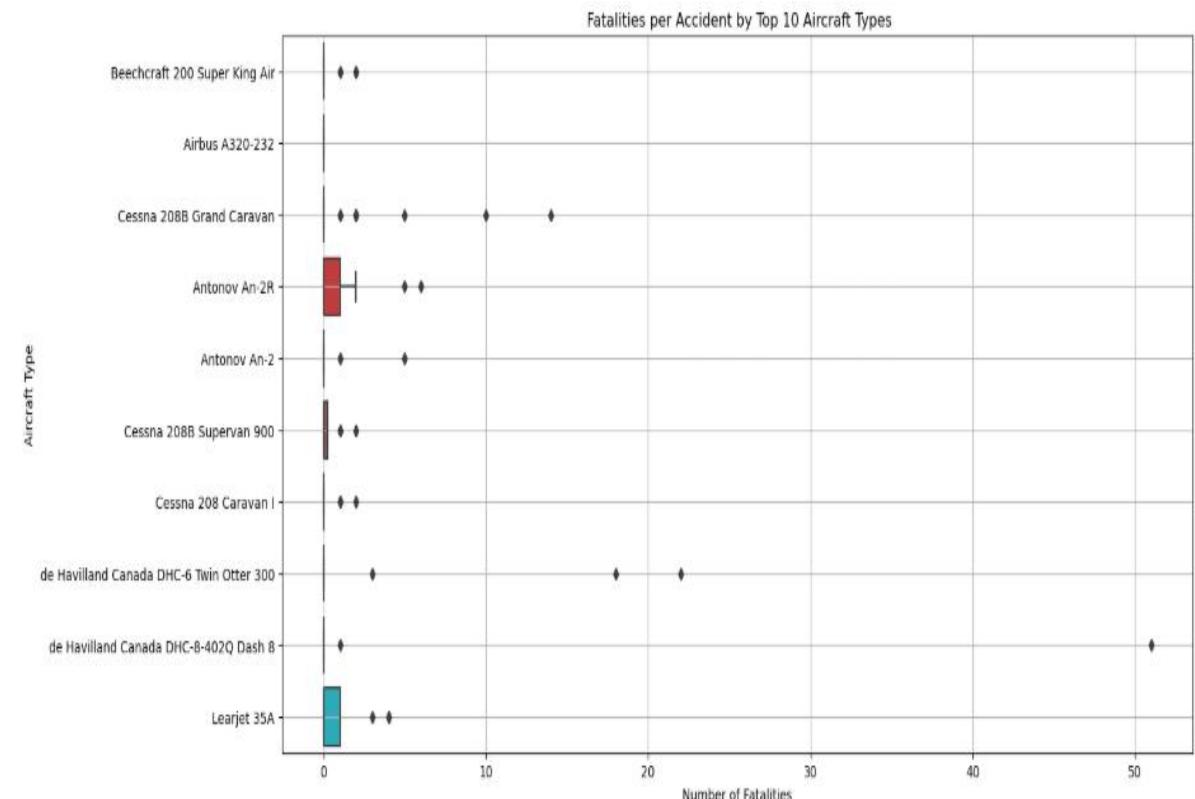
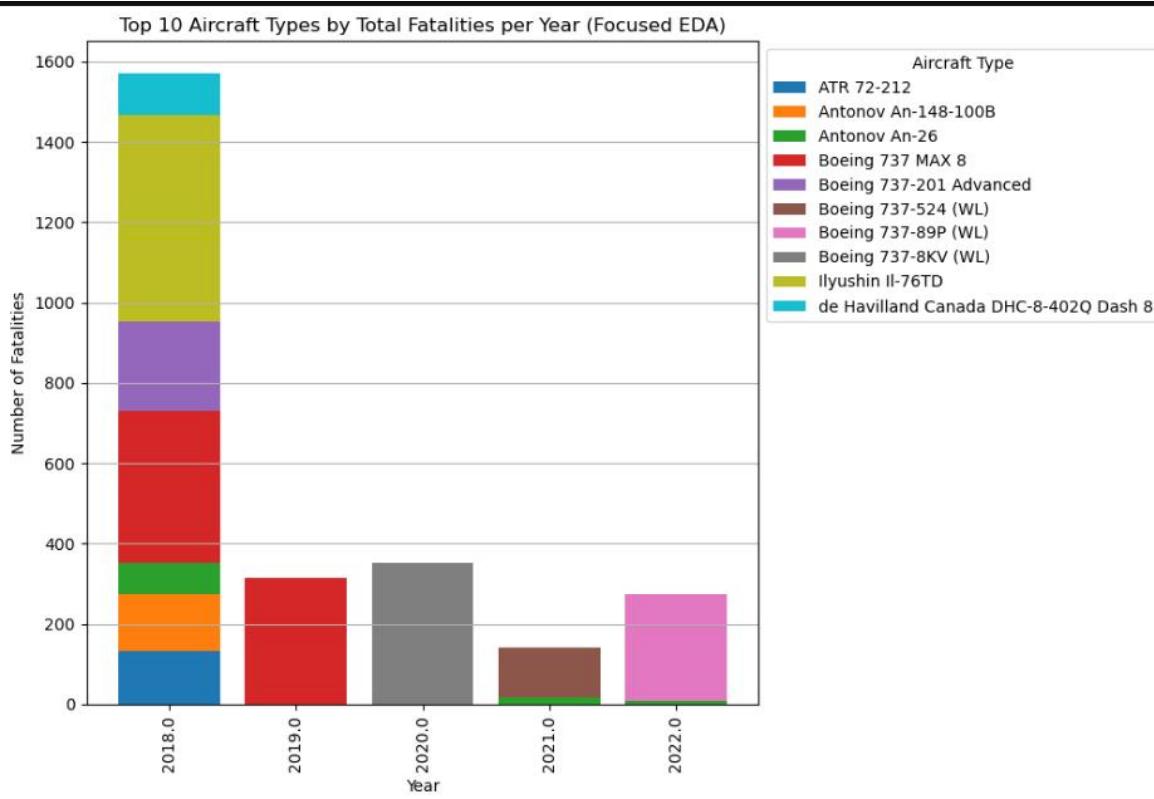
BUSINESS PROBLEM AND OBJECTIVES

- Expansion into purchasing and operating aircraft for commercial and private enterprises.
- The company wants to know the risks involved before taking initiative into purchasing lowest risk aircrafts for their venture.
- we then have to translate the findings into actionable insights for business stakeholder.

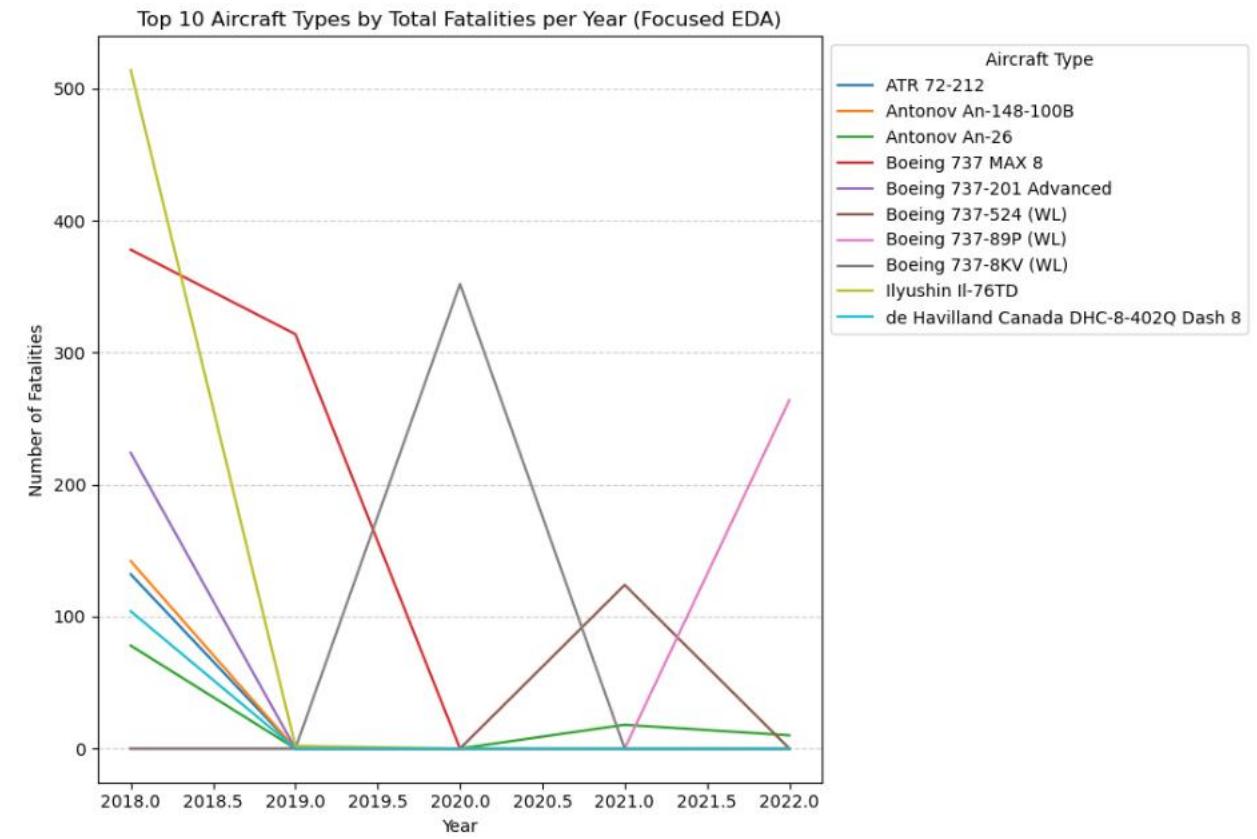
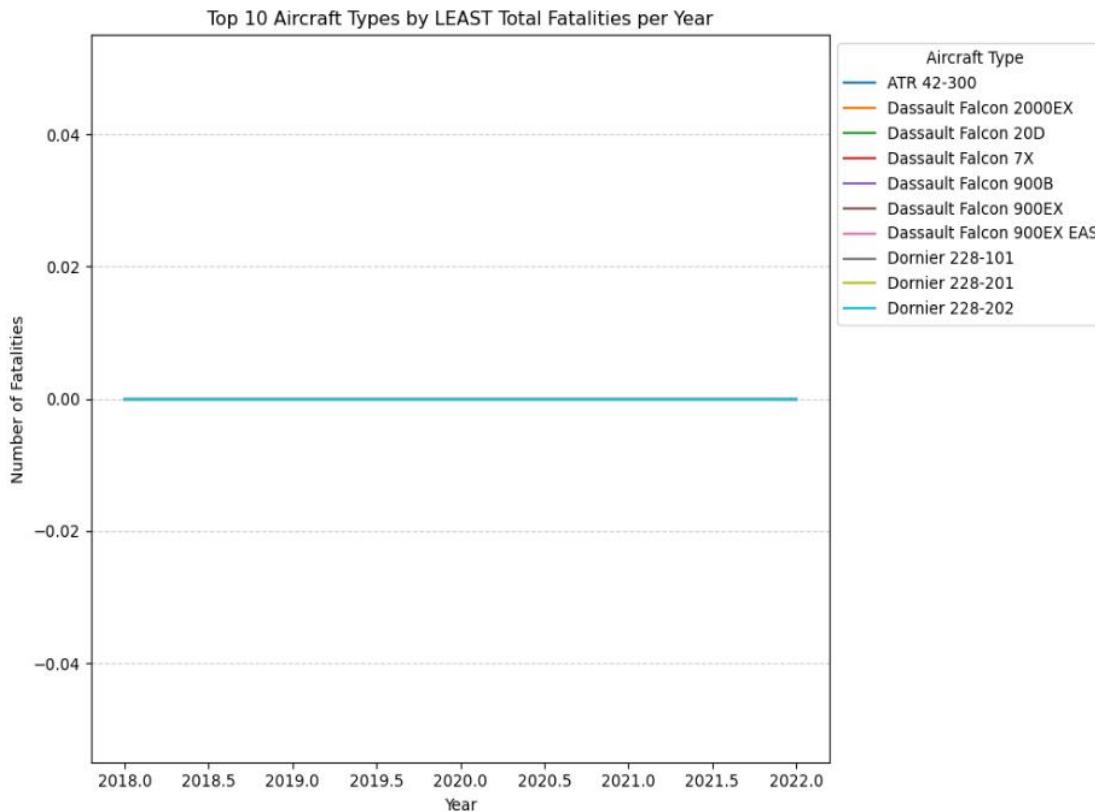
DATA ANALYSIS

- Data source - National Transportation Safety body data set(1962-2023)
- Data cleaning - here we used pandas to clean the data whereby imputation, aggregation and visualization was done with all steps designed to help the organization make data driven decisions

RESULTS (Focused EDA)



RESULTS(focused EDA)cont.



CONCLUSIONS AND RECOMMENDATIONS

- Promote the purchase and use of safer aircraft types like the dassault falcon series as well as the dornier 228 series which have exhibited lower fatality rates per accident in their service history i.e we have determined that safety varies by model.
- Operational standards are crucial - maintenance of the aircrafts in the airline as well as pilot training protocols is important for overal safety.
- Ensure data driven management. as we have done imputation above, sharing of this kind of information acrosss the aviation community wiould really help in preventing accidents in the foreseable future. This entails sharing data with regulatory bodies , other airlines and manufacturers.