AIRCRAFT DATA ANALYSIS

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OBJECTIVE

- Build Reputation for Safety in new Aviation Industry.

PROBLEM STATEMENT

- To Identify the Safest Aircraft model with lower incidence and accident to Invest in a commercialized set up.

DATA UNDERSTANDING/ANALYSIS

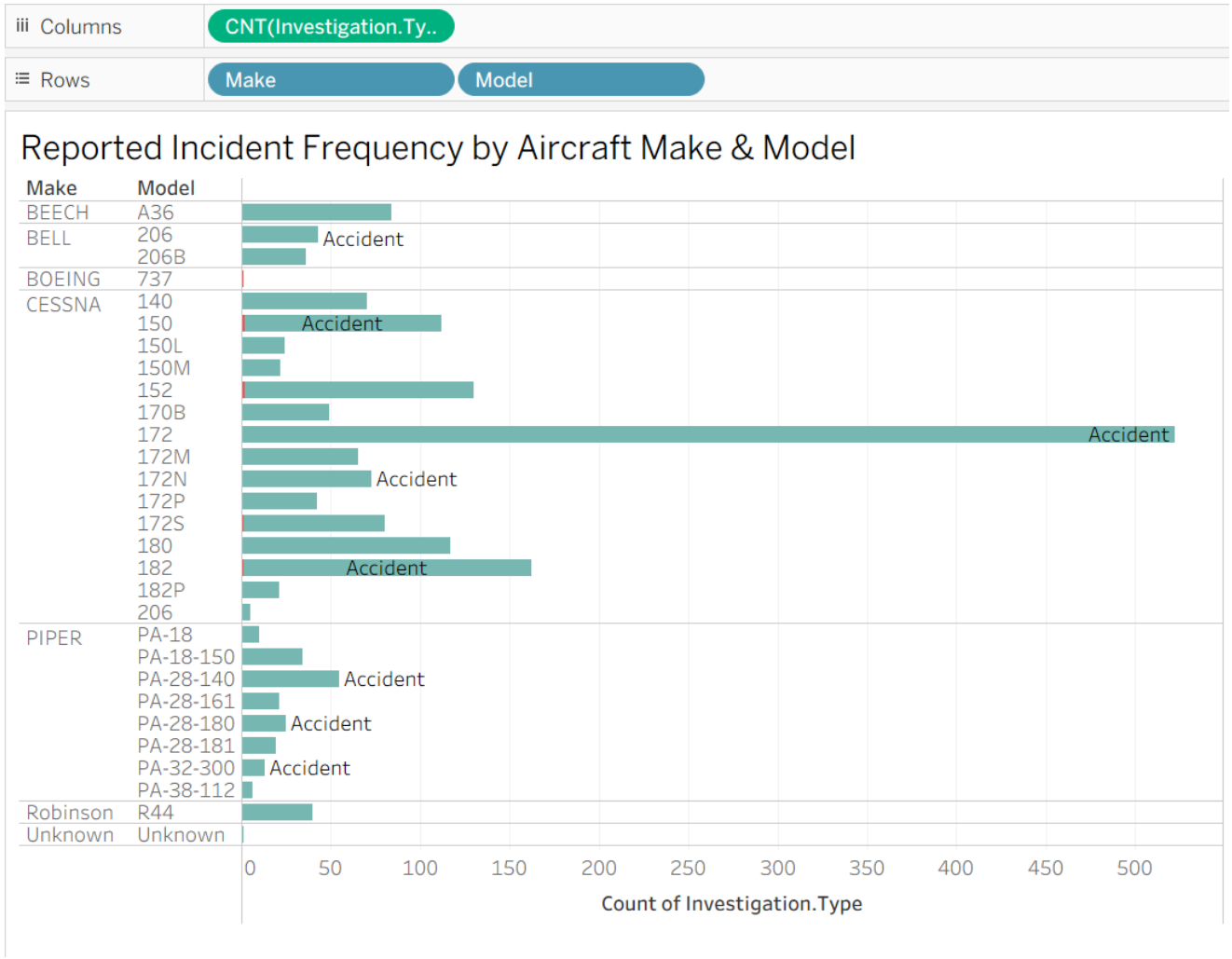
Data Cleanup:

Excluded models with incomplete records and filled the ones that had less missing values

Changed Data Types with the preferred ones

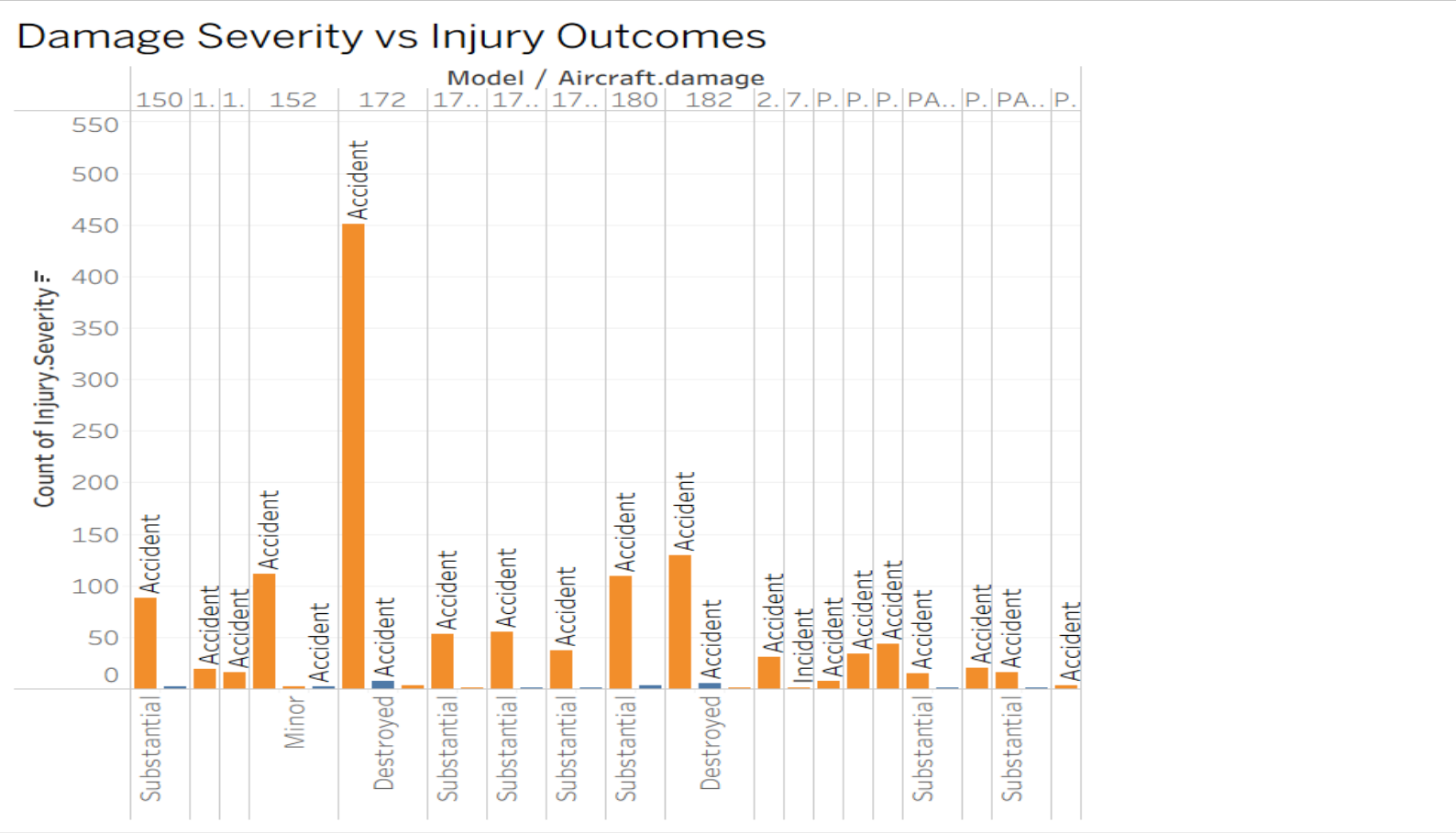
Correcting data inconsistency

FIRST FINDING IN MAKE AND MODEL



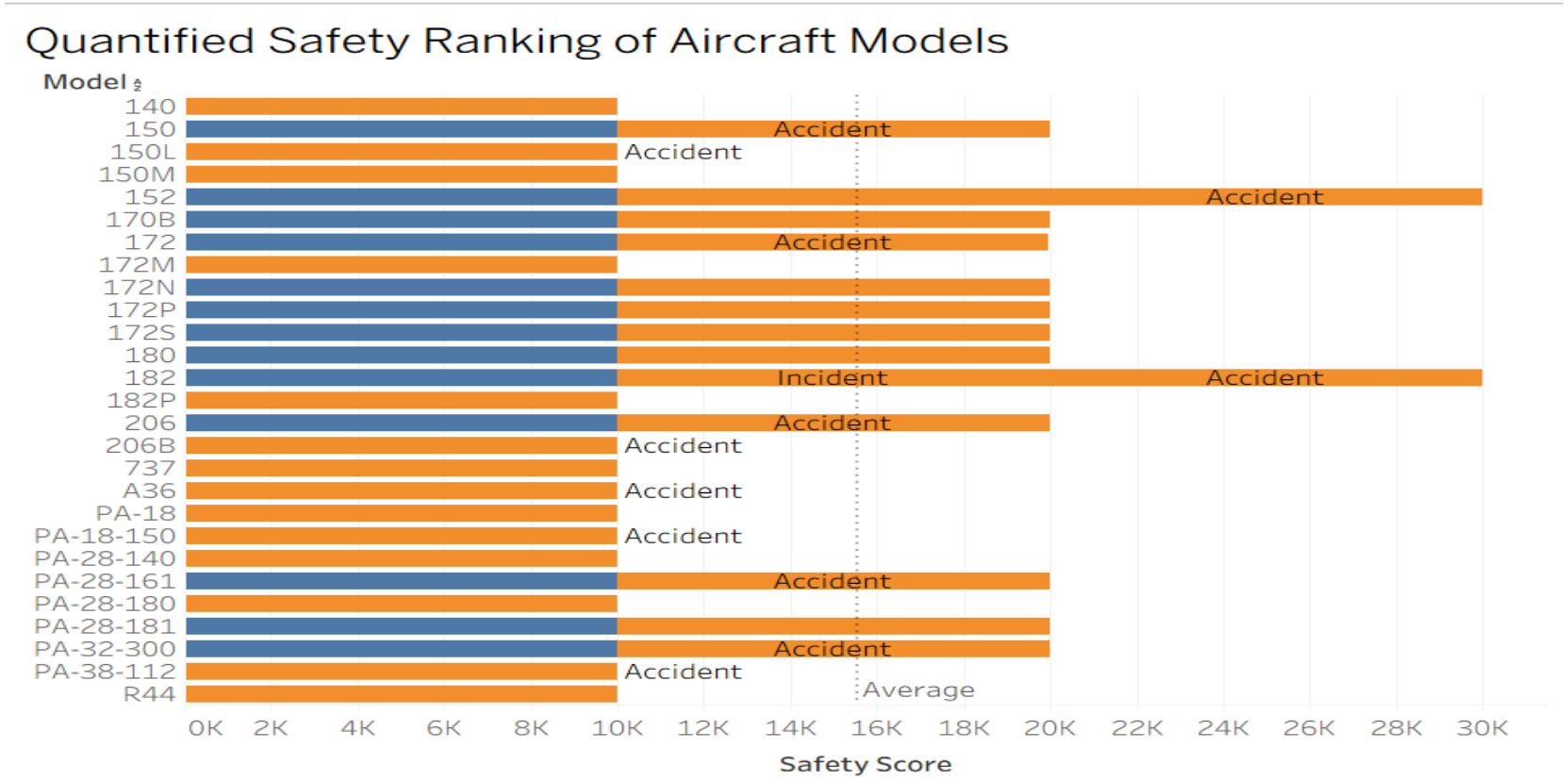
Cessna 152: 94 incidentsCessna 172: 178 incidentsPiper PA-28-140: 33 incidents

SECOND FINDING ON DAMAGE SEVERITY



Shows some models frequently result in total losses(35% for Cessana 152)Ground Cessna 152/172 and Piper PA-28s from initial fleet plans.Lease Cessna 206B for early operations to minimize risk.Audit Boeing 737 data for commercial viability.

KEY INDICATORS



Cessna 152: 9,990.77 score but 1,883 severe accidents (She et 2).Boeing 737: 9,999.60 score + 1 incident (trustw orthy).

RECOMMENDATION

- I would recommend Boeing 737 for commercial option due to its validated safety, as well as Cessna 206B for immediate buyers due to its lowest damage rates.
- This is because the Cessna is used mostly in training.

CONCLUSION

Cessna 206B and Boeing 737 got it right for a business venture.

THANK YOU