APPLICATION OF DATA IN AVIATION INDUSTRY IDEA PROPOSAL

by

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Chapter 1

Airlines Delay and Cancellation Prediction Optimization for DXB

1.1 Problem Space

- Plane delays and cancellations are a huge inconvenience, not only for the passengers, crew and pilots flying but also for the airline who incurs financial losses due tp the delays and the airport who were expecting the resources allocated to the plane to be free.
- A solution where delays could be detected ahead of time by all parties can help with planning that while may not be able to prevent it, can minimize the cost financial or otherwise to all parties.
- However current prediction software is not verry accurate as it is inherantly difficult to gather data that correlates to delays or cancellations.

1.2 Data Sets

- Jared Brooks Kaggle Datset
- Gabriel Atkin Kaggle Datset
- FabienDaniel Kaggle Datset

1.3 Publications

- Airline Flight Delay Prediction Using Machine Learning Models
- Analysis of Flight Delay and Cancellation Prediction Based on Machine Learning Models
- A Classification Prediction Analysis of Flight Cancellation Based on Spark
- Flight delay/cancellation prediction using machine learning Adapting new ways to help stranded passengers

1.4 Hypothesis

- Most of the Research as well as data set links above are 2+ years old. Using newer machine learning models and with the current abundance of data we could not only produce more accurate results but could potentially produce them faster