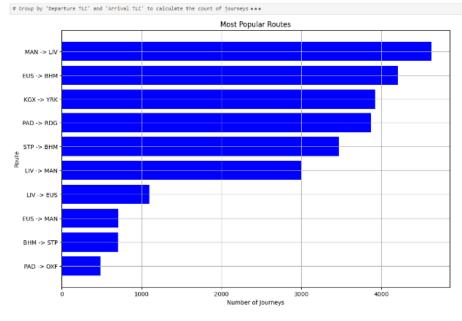


Data Analysis

Popular Routes (by departure and arrival stations)



Revenue Analysis of Popular Routes

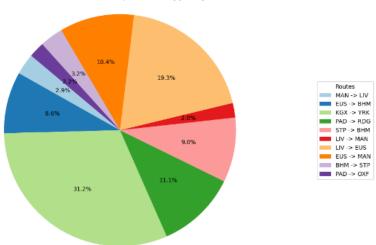
- 1. We've discovered that the two most travelled routes (MAN to LIV and EUS to BHM) are also the lowest revenue generating routes at 2.9% and 8.6% respectively.
- 2. We've also uncovered that two of the least travelled routes combined (LIV to EUS and EUS to MAN) generate nearly as much revenue as the highest revenue generating route (KGX to YRK).

Recommendation

Prices for frequented routes should be re-evaluated as they are currently undersold.

Group by 'Departure TLC' and 'Arrival TLC' to calculate the count of journeys ***

Revenue Distribution of Most Popular Routes by Journey Count



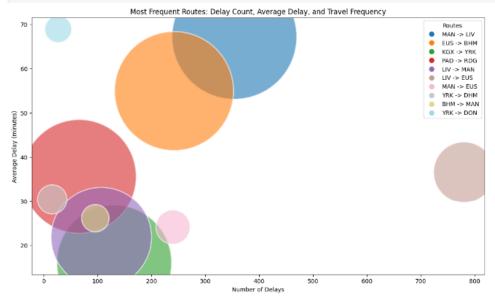
Performance Analysis of Popular Routes

- 1. We've discovered that two of the most frequented routes (MAN to LIV and EUS to BHM) are delayed very frequently, and the average delay time is 55-65min.
- 2. We've also uncovered that the most profitable route (KGX to YRK) suffers only occassional delays at an average delay time of approx. 15min

Recommendations

It is evident that MAN to LIV and EUS to BHM have the potential to generate more revenue if the delays could be reduced when comparing this to KGX to YRK.

Convert 'Departure Time', 'Arrival Time', and 'Actual Arrival Time' to datetime objects •••



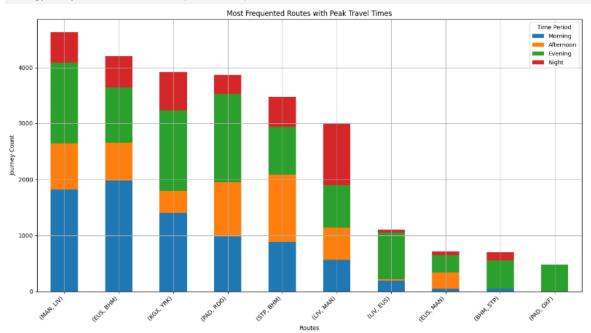
Peak Travel Analysis of Popular Routes

- 1. The most frequented routes (MAN to LIV and EUS to BHM) have heavy morning traffic
- The most revenue generating route KGX to YRK is experiencing equal high traffic during morning and evening.
 The 2 nd most revenue generating route KGX to YRK is experiencing equal high traffic during morning and evening.
 The 2nd most revenue generating route LIV to EUS is experiencing extremely heavy evening traffic.

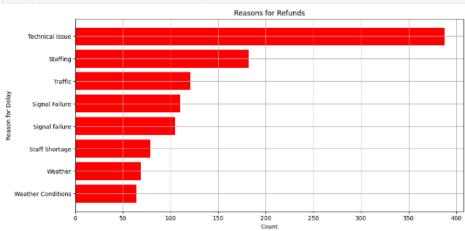
Recommendations

Alleviating morning and evening traffic for the above routes by making available backup trains in case of breakdowns is going generate additional revenue and reduce refunds/cancellations.

Assuming you already have a DataFrame df with columns 'Departure TLC' and 'Departure Time' ***



Group by 'Reason for Delay' and calculate the count of refund requests $\bullet \bullet \bullet$



Click to add a cell.