

5. Business Insights & Recommendations

The analysis revealed SkyLite Air generated £78 million in revenue, with £22 million in operational costs across 138,000 transactions. The airline operates 40 aircraft over 20 routes, completing 500 flights per month. See below for key insights and recommendations.

In-demand Route: Analysis of flight bookings shows that the five most in-demand routes lead to Tokyo, Barcelona, Paris, Turkey, and Rome, indicating high passenger traffic on these routes.

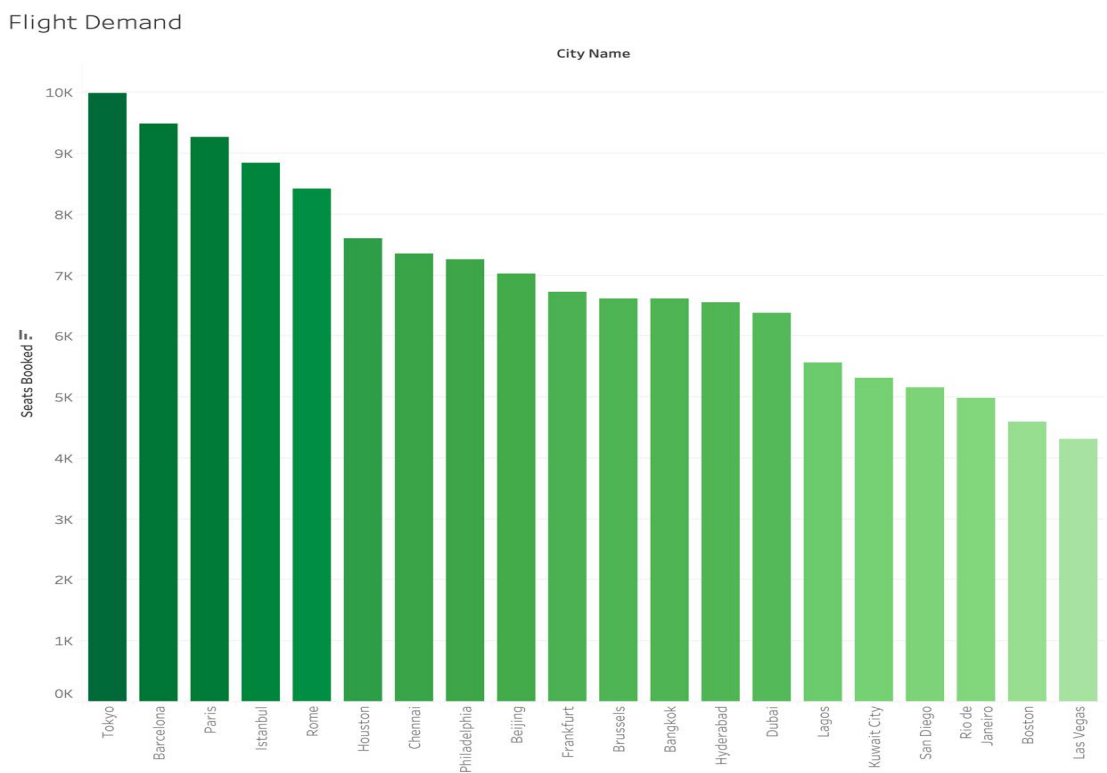


Figure 3: In- demand route

Recommendation: SkyLite Air should increase flight frequency on these high-demand routes to maximize revenue and improve passenger convenience. Additionally, optimizing aircraft allocation and considering larger aircraft for these routes can help meet demand efficiently.

Seat Occupancy: Flights to Paris have the highest fill rate, followed by Istanbul and Philadelphia, indicating that these routes consistently operate at near-full capacity.

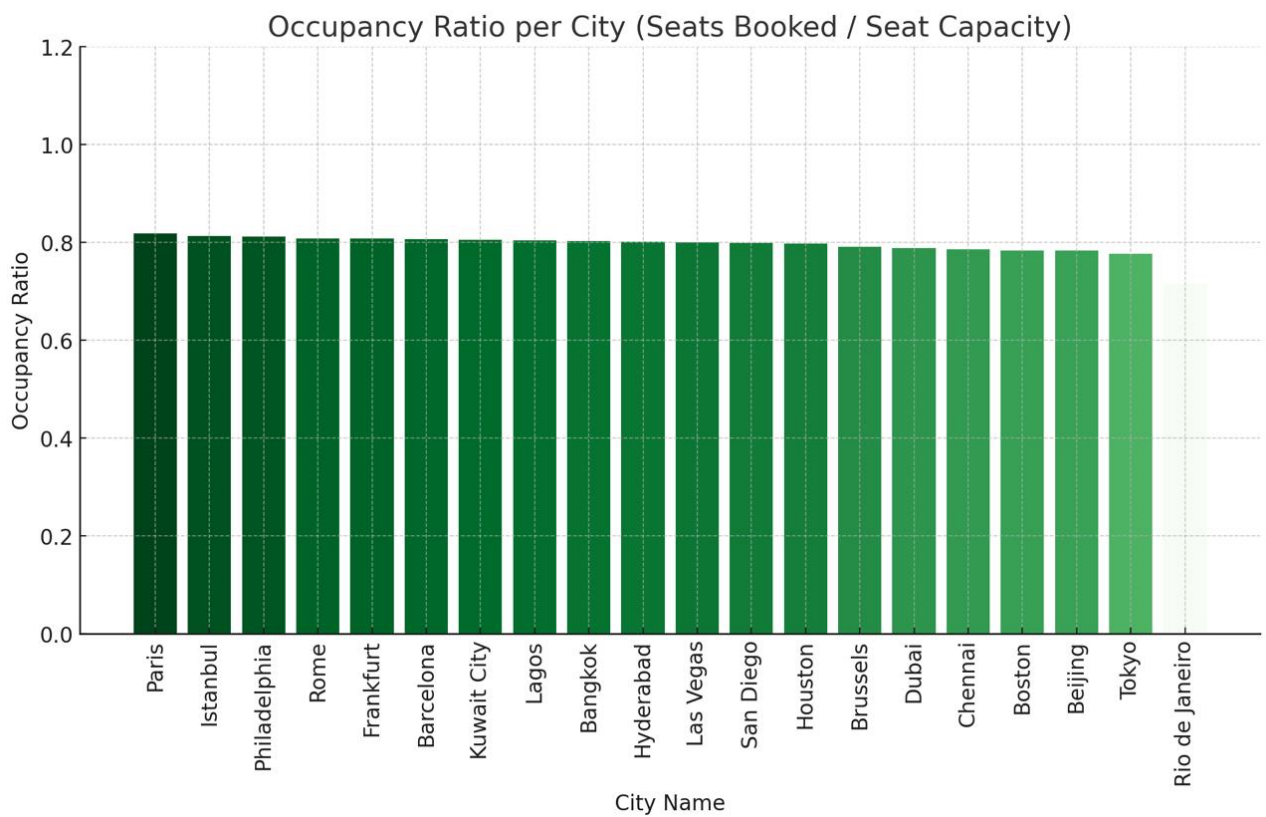


Figure 4: Seat Occupancy

Recommendation: SkyLite Air can introduce dynamic pricing strategies to maximize revenue while maintaining high seat occupancy. This helps in overall profit growth.

Route Revenue: Routes to Tokyo, Bangkok, and Las Vegas generate the highest total revenue, indicating their strong profitability. Additionally, the average revenue per flight on these routes is also among the highest, reinforcing their importance in the airline's network.

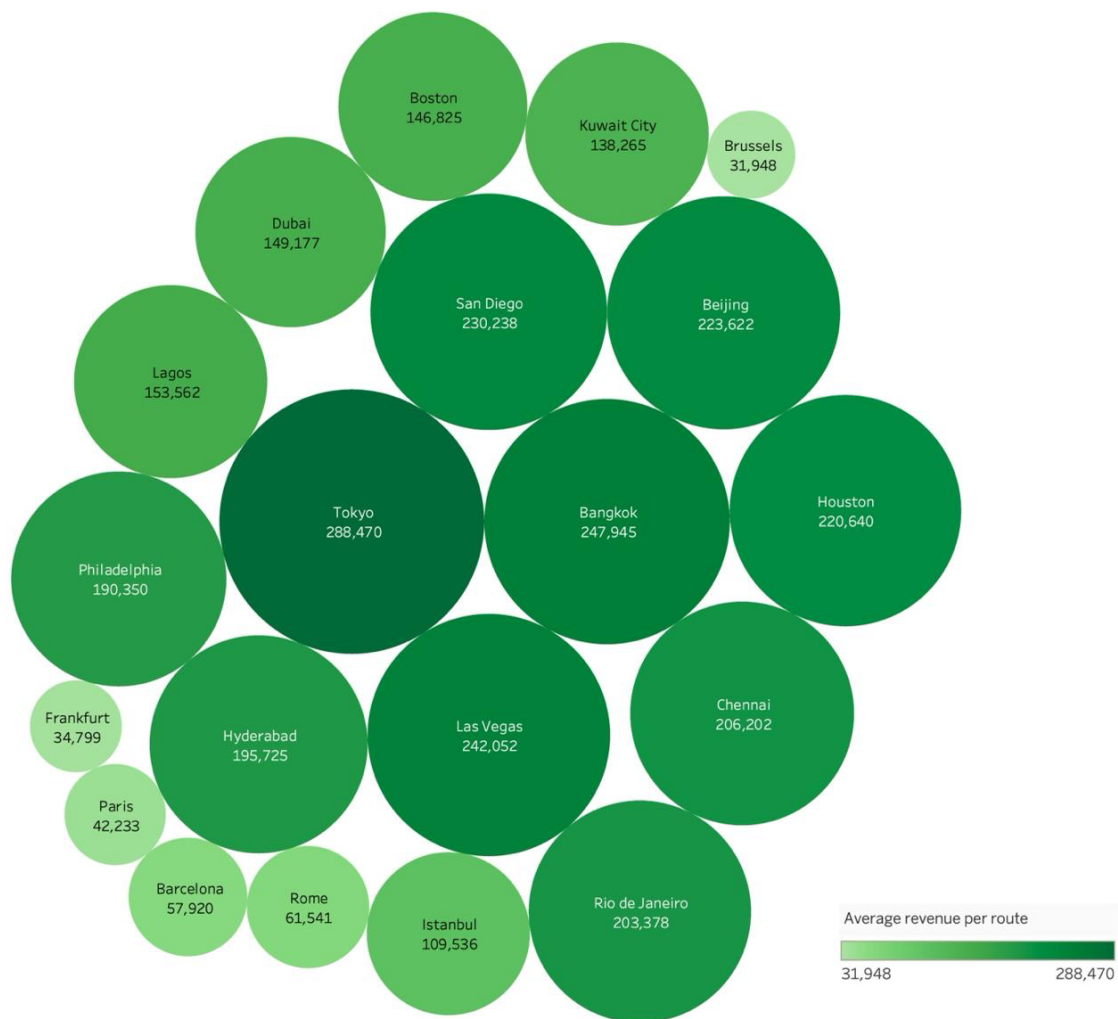


Figure 5: Route Revenue

Recommendation: Optimize pricing strategies by introducing premium seating options or bundled services to further enhance revenue potential. Additionally, services or fare adjustments could be introduced to enhance revenue per flight while maintaining customer satisfaction.

Peak Travel Day: Analysis of flight bookings reveals that Wednesdays and Thursdays have the highest seat demand. These peak travel days indicate increased passenger movement, suggesting a consistent trend in mid-week travel preferences.

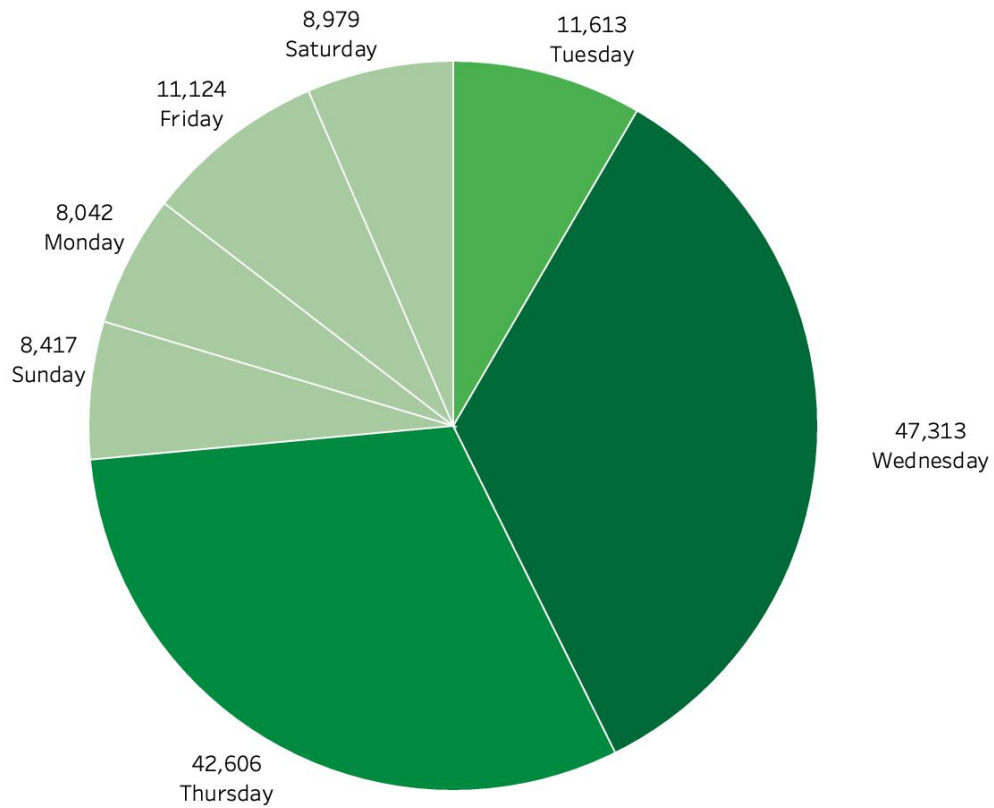


Figure 6: Peak Travel Day

Recommendation: To capitalize on demand, SkyLite Air should increase flight frequency on these days, particularly on high-traffic routes. It can maximize revenue, ensuring efficient aircraft utilization.

Underutilized Flights: An aircraft 28 of type A380 and aircraft 20 of type A320 are severely underutilized, flying only once in the entire month. This indicates potential inefficiencies in fleet allocation and scheduling. It can be reassigned to Tokyo and Paris based on demand and revenue potential.

A cost estimation analysis confirms the average operational cost per flight for these aircraft on their respective routes, ensuring data-driven decision-making. So, aircraft 28 can be assigned on

the Tokyo route (long haul) and aircraft 20 can be assigned on the Paris route (short haul). The average cost for an aircraft model A380 to fly to Tokyo is 129542, and that for aircraft model A320 to Paris is 5478. The average revenue on these routes have been found to be 288470 and 42233 respectively, so there is significant margin to be made here.

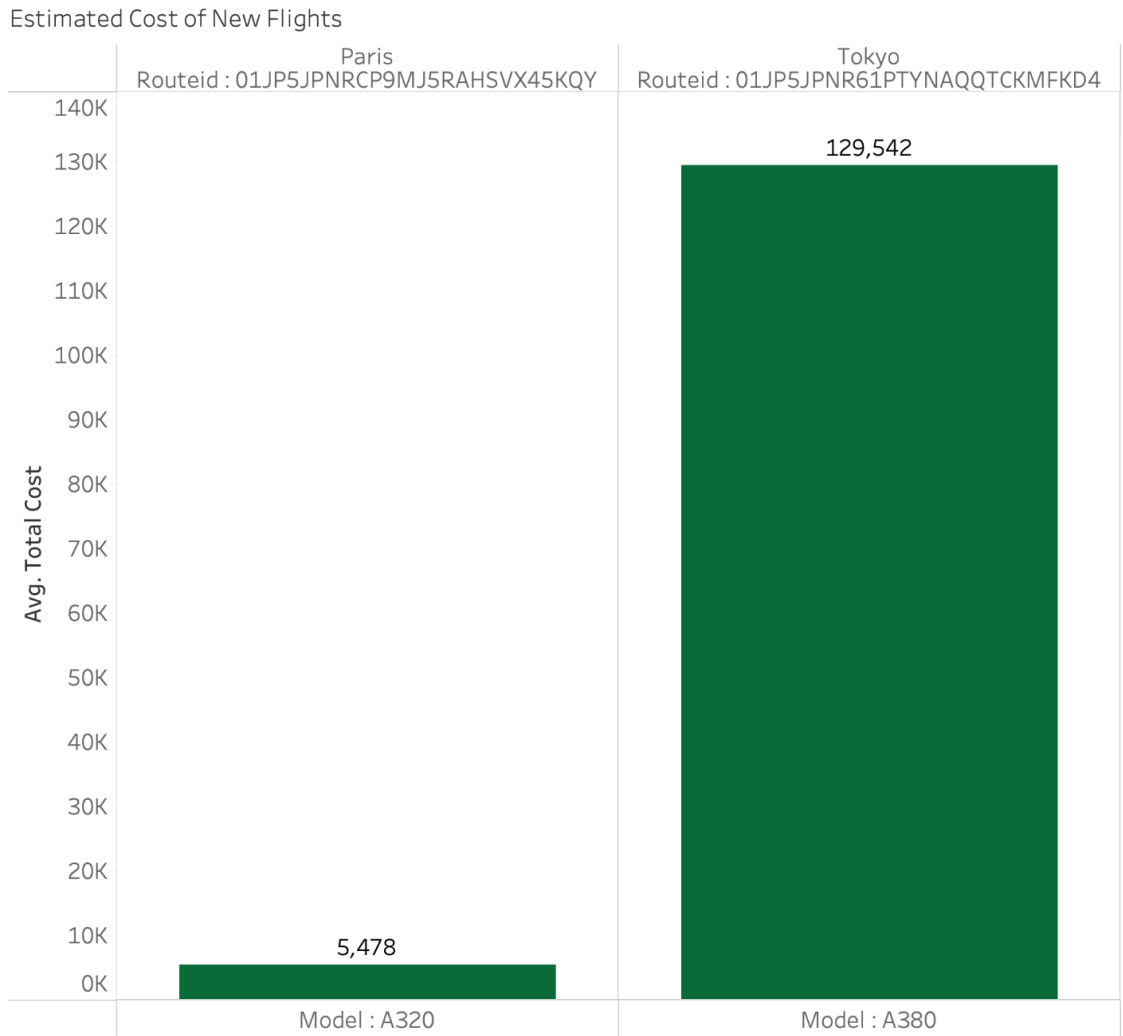


Figure 7: Estimated Cost for Flight

Recommendation: SkyLite Air should reassign these aircraft to high-demand routes or explore leasing options to maximize operational efficiency. Monitor profitability closely by comparing operational costs with revenue and adjusting flight schedules if needed for better cost efficiency. Refer to Appendix D for SQL queries of these insights.