

Group - DatAlchemy

Final Project Presentation

Airline Passenger Satisfaction



Group members:

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DSC 465 - Data Visualization
DePaul University
Prof. Jodi Hill
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Agenda



Data



Dimension

👉 Rows: 129,880

👉 Columns: 24



Numerical

👉 ID

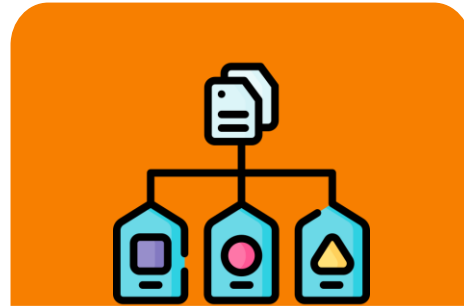
👉 Age

👉 Flight Distance

👉 Departure

Delay

👉 Arrival Delay



Categorical

👉 Gender

👉 Customer Type

👉 Type of Travel

👉 Class

👉 Satisfaction

Status

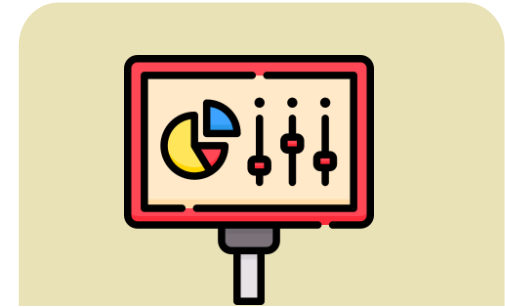


Ordinal

👉 14 survey questions.

👉 1 (lowest) to 5 (highest)

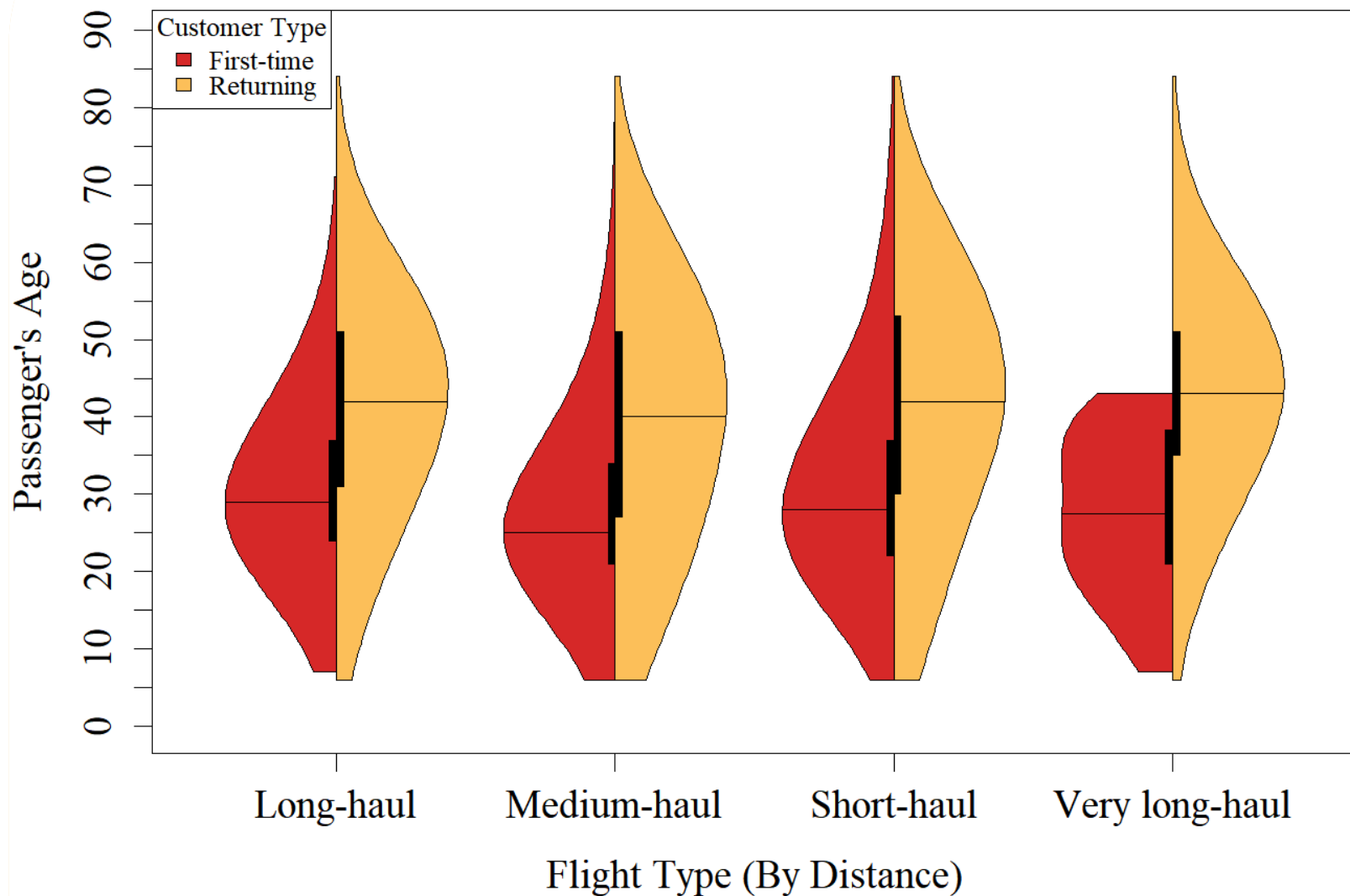
👉 0 (N/A)



Objective

👉 Identify areas for improvement in airline services to enhance passenger satisfaction.

Age Distribution of Travelers by Flight Distance



Short haul (< 500mi)

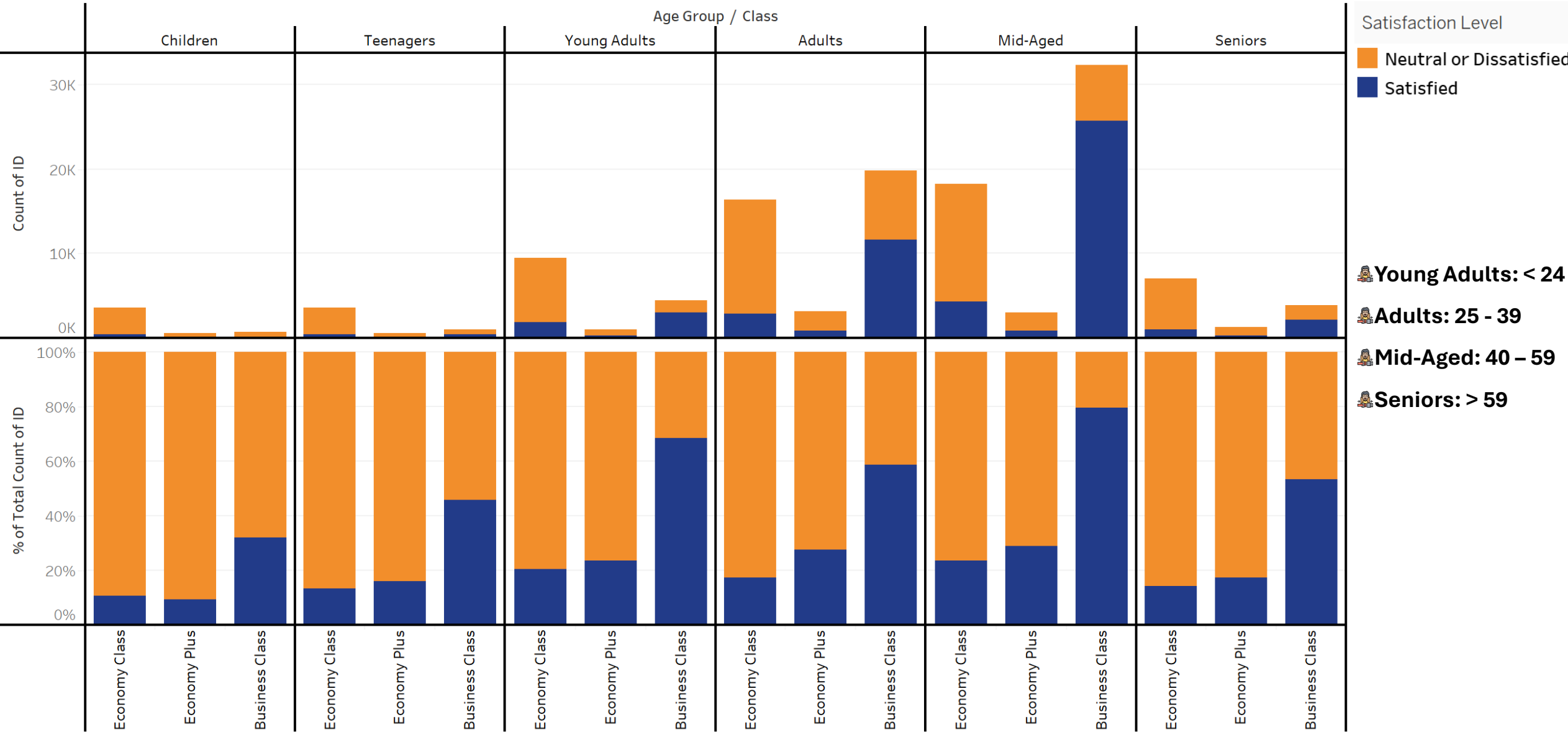
Medium haul (< 1500mi)

Long haul (< 3000mi)

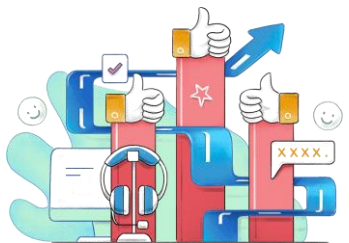
V. Long haul (> 3000mi)



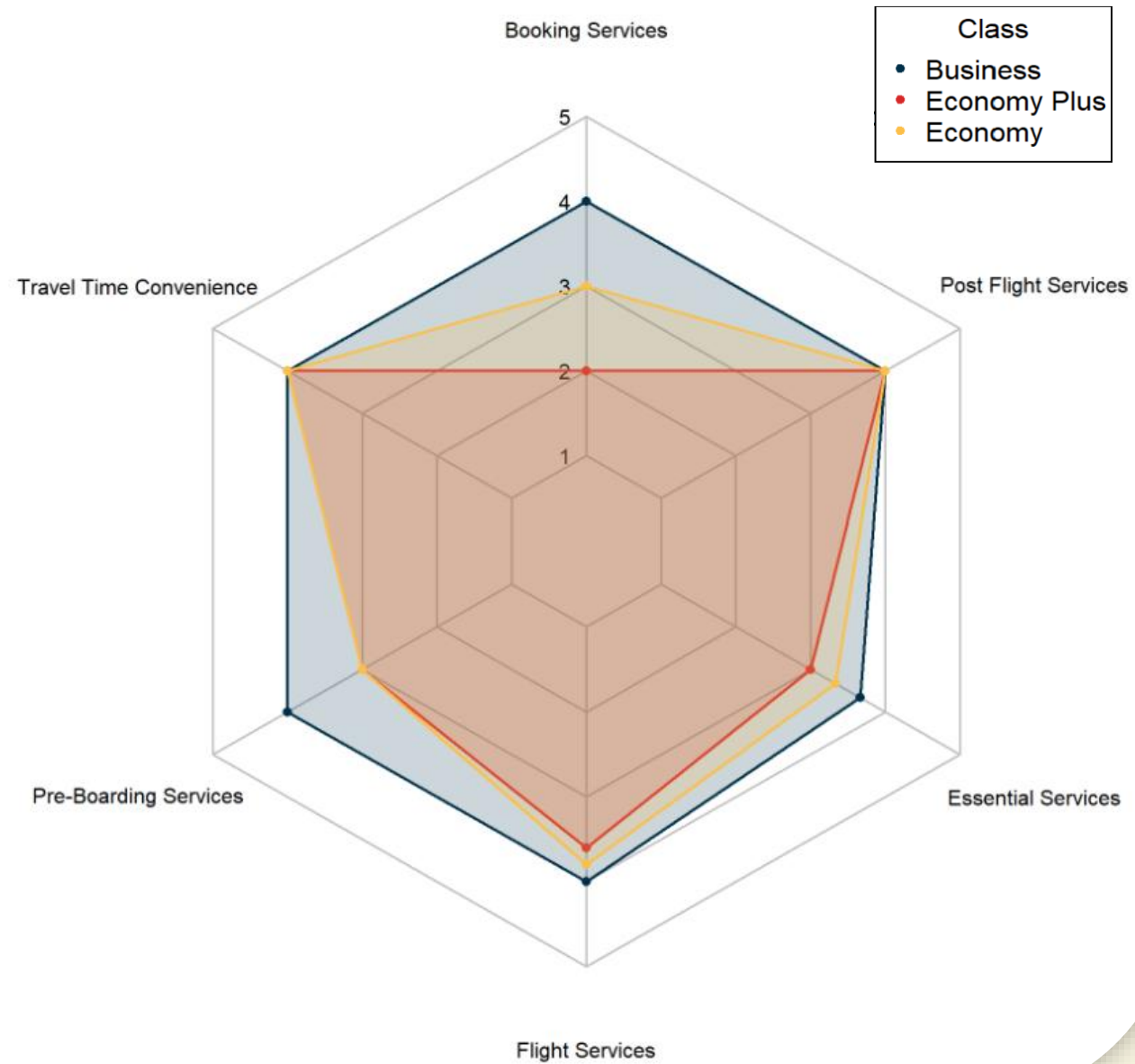
Satisfaction Level Distribution by Age Group and Class



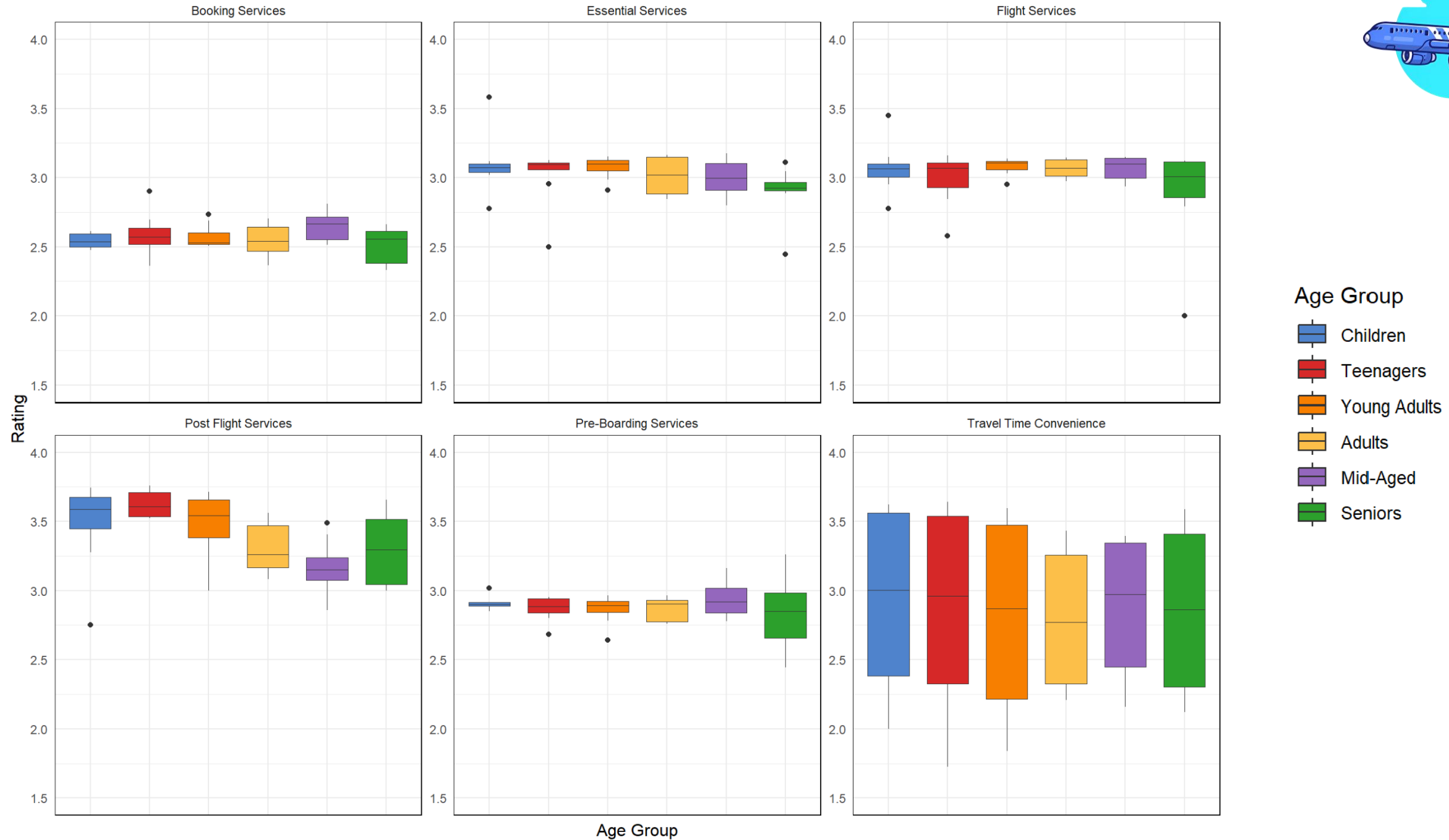
 **Over 60% of passengers travel in Economy and Economy plus**



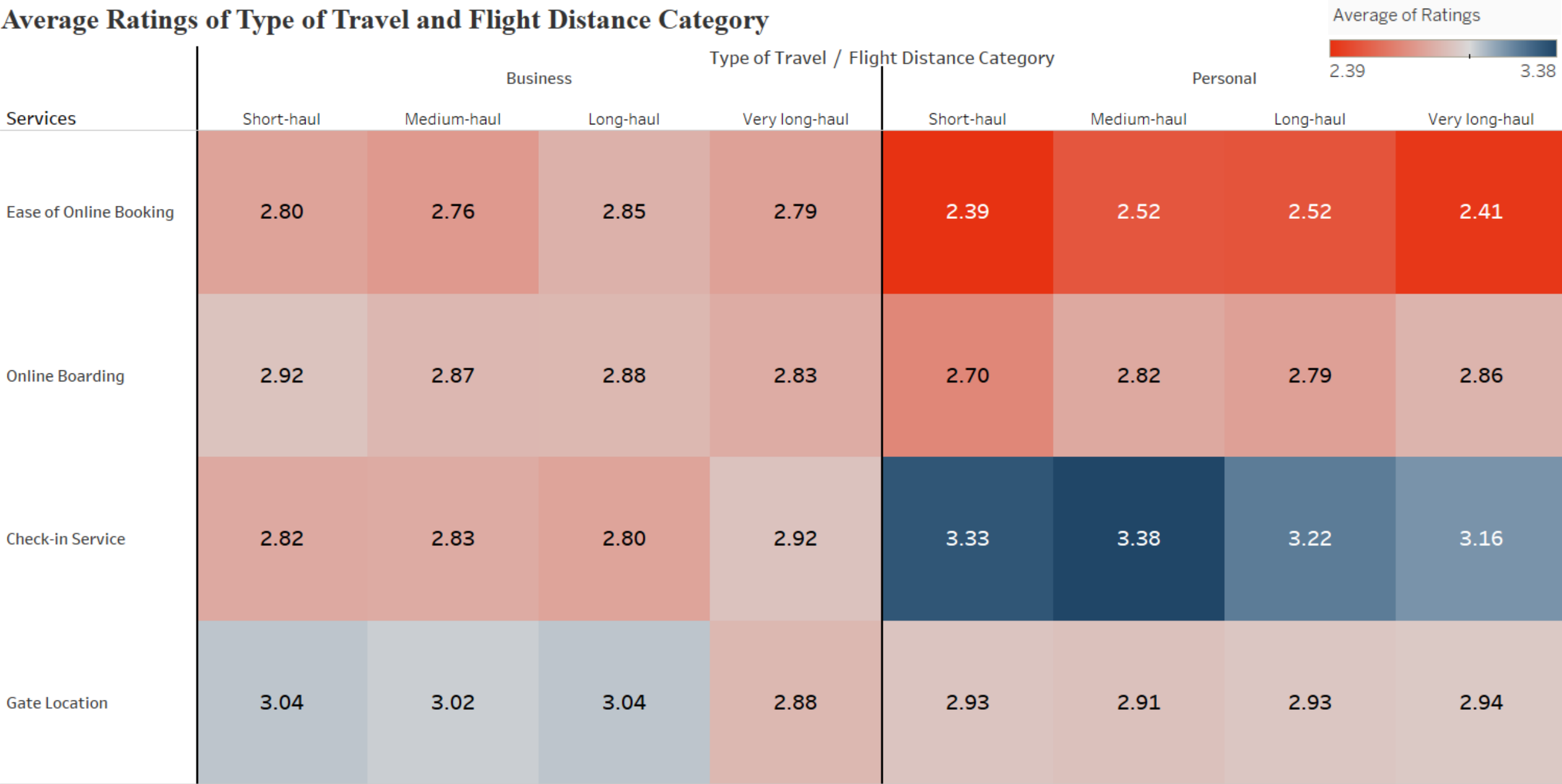
Service Ratings by Class



Service Ratings by Age Group (Economy and Economy Plus)



Average Ratings of Type of Travel and Flight Distance Category



Conclusion

- ✚ Most airline passengers are Adults and Mid-Aged (25-59 years old).
- ✚ Passengers are generally more satisfied flying Business class.
- ✚ Passengers from Economy and Economy Plus classes have rated lesser compared to Business class for various service categories.
- ✚ Booking and Pre-Boarding have least median ratings among all the service categories (< 3.0).

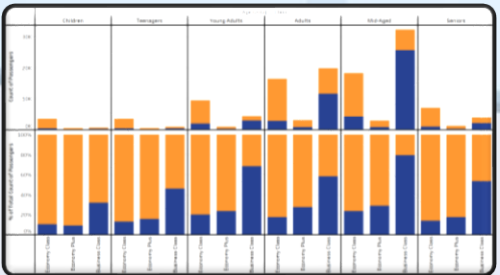
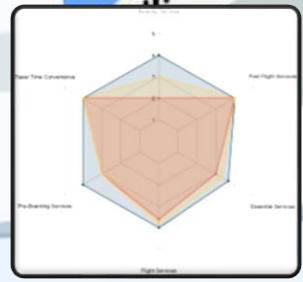
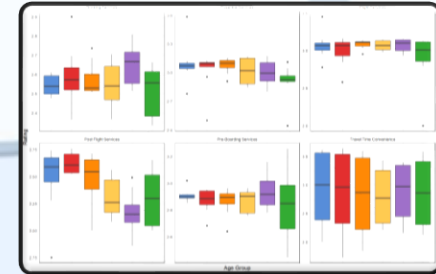
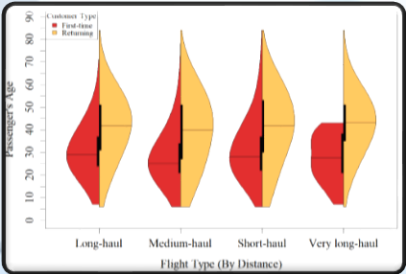
Recommendation

Objective: Identify areas for improvement in airline services to enhance passenger satisfaction.

- ✚ For Economy and Economy Plus classes, develop improvement plan for Booking and Pre-Boarding services.
- ✚ Specifically, convenience in booking online. Working with third-party ticket vendor or other airlines.
- ✚ Improve Check-in service for Business class.



Q & A



Services	Business				Economy			
	Short-haul	Medium-haul	Long-haul	Very long-haul	Short-haul	Medium-haul	Long-haul	Very long-haul
Time of Online Booking	2.80	2.76	2.85	2.79	2.39	2.52	2.52	2.41
Online Boarding	2.92	2.87	2.88	2.83	2.70	2.82	2.79	2.86
Check-in Service	2.82	2.83	2.80	2.92	3.31	3.38	3.22	3.16
Gate Location	3.04	3.02	3.04	2.88	2.83	2.81	2.83	2.94



THANK YOU!!