


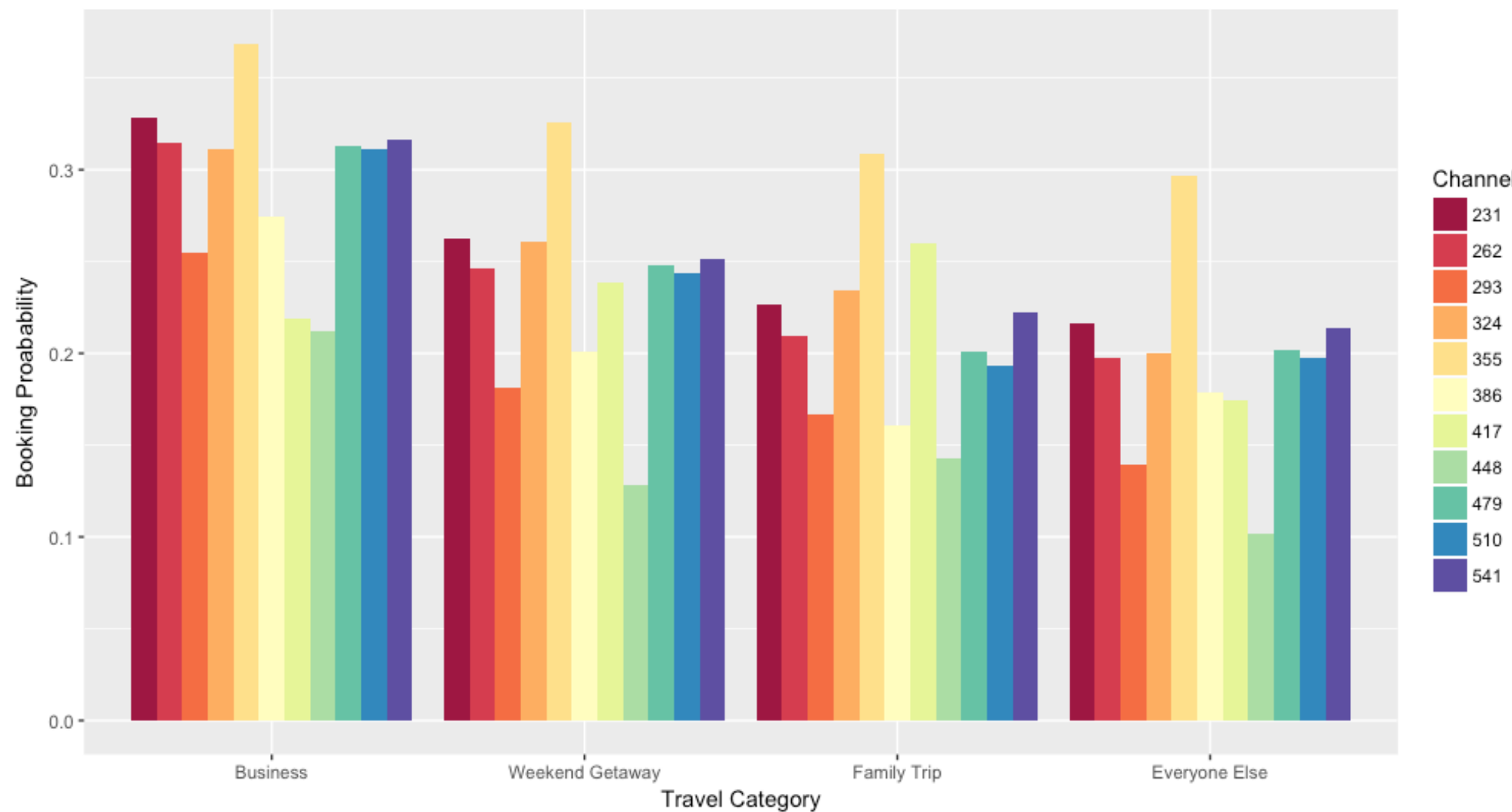
Understanding Useful Trends for Price Discrimination

- **TEAM Name:** Data Bugs
- **TEAM Members:** Ben Czekanski, Kailash Pandey & Ana Sanchez Chico

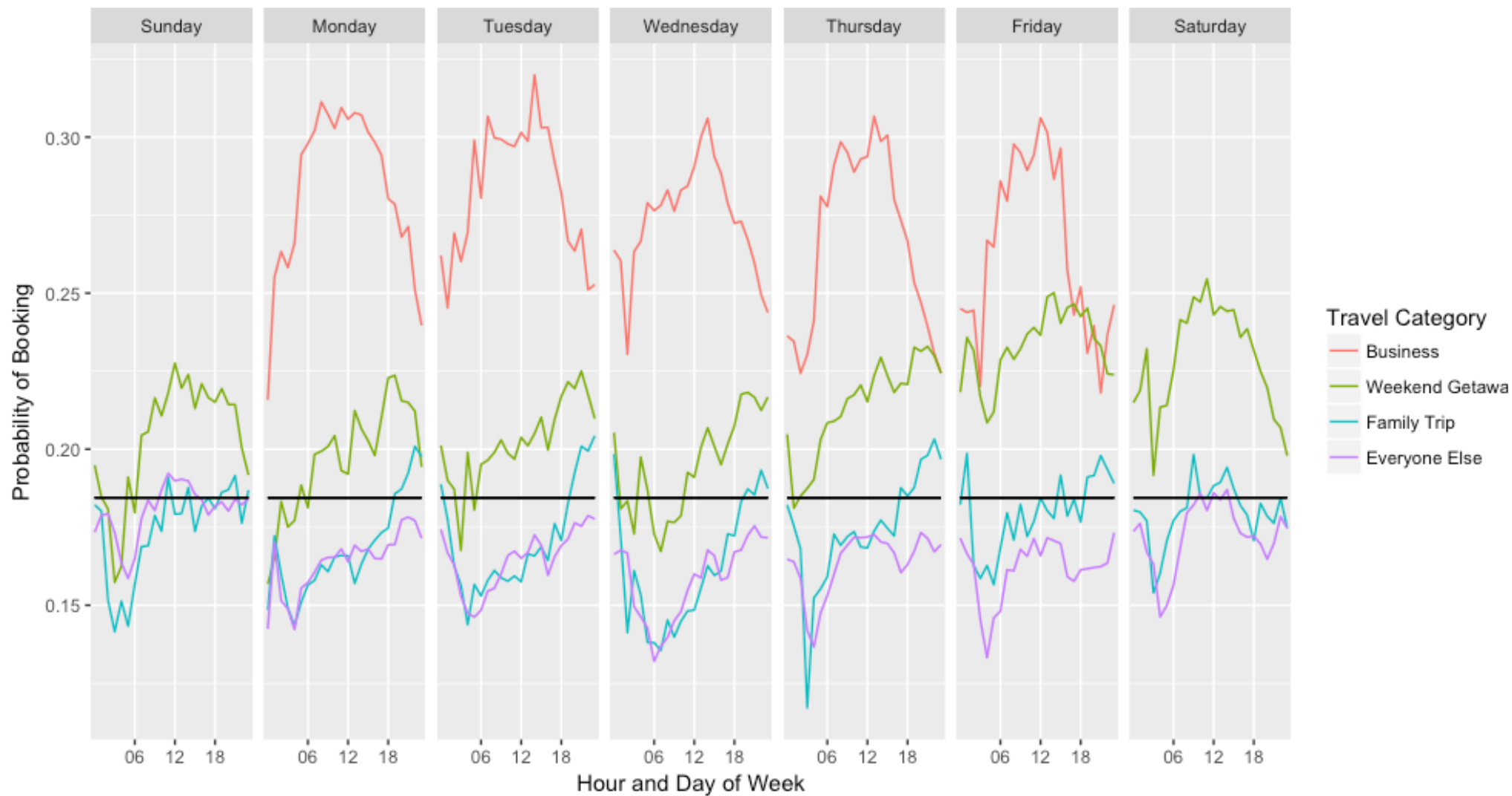


Variables	Definition
Channel	ID of marketing channel How a user arrives at the Expedia site: e.g. directly, Trivago, Google
Travel Category	Business Trip (4.2%): <ul style="list-style-type: none"> · Trip made and booked during the week, 1 person per room. Weekend Getaway (17.2%): <ul style="list-style-type: none"> · For couples/single individuals/ friends. Trips made on Saturday or Sunday and No children Family Trip (17.9%): <ul style="list-style-type: none"> · Any-type and length of trip with Children Everyone Else (60.7%)
Trip length	Check out date - check in date
Probability (Booking)	$\frac{\text{\# of People who booked}}{\text{\# of People who visited Expedia}}$
Plan Time	Checking date – booking date

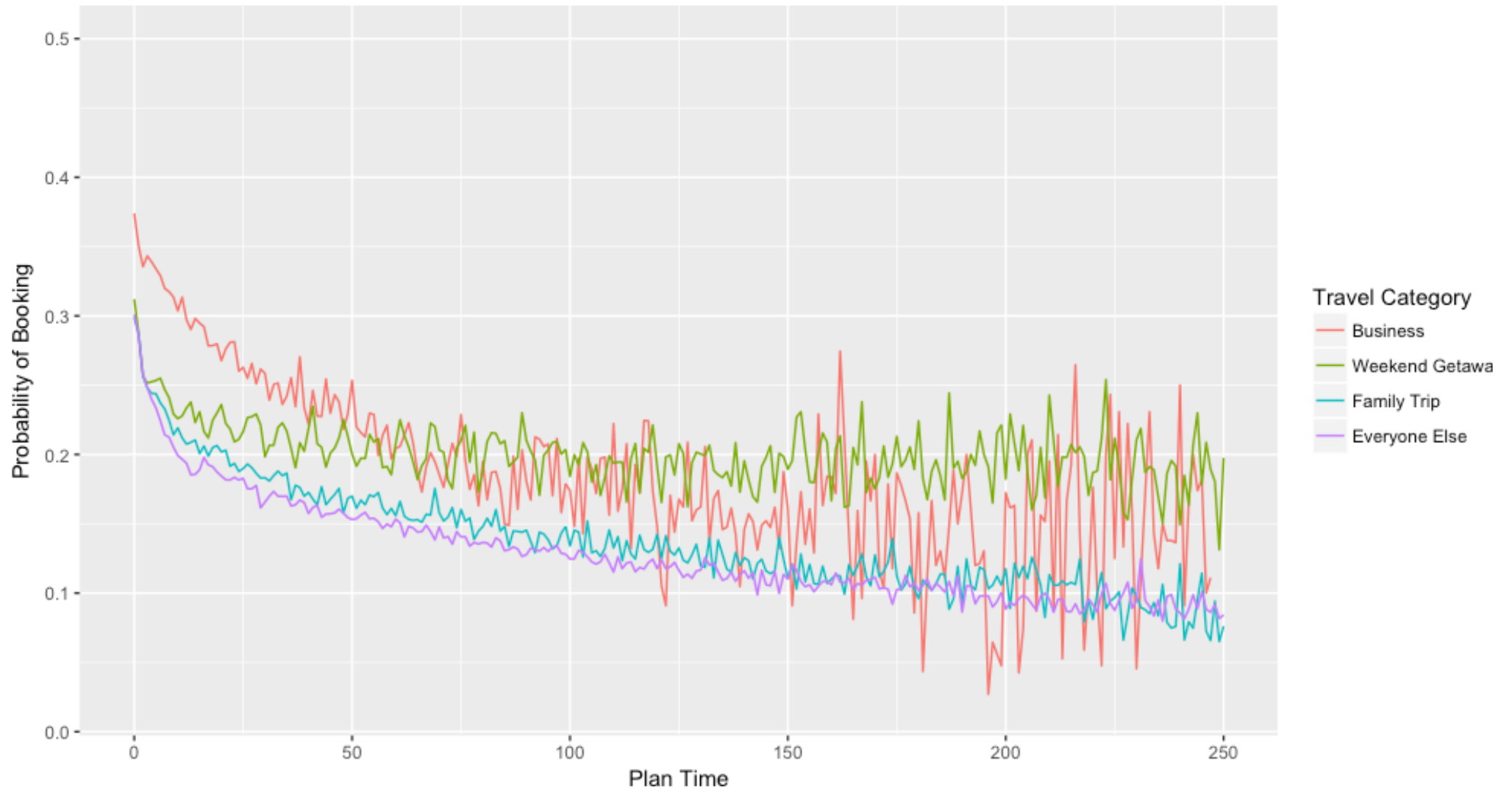
Booking Probability by Travel Category and Channel



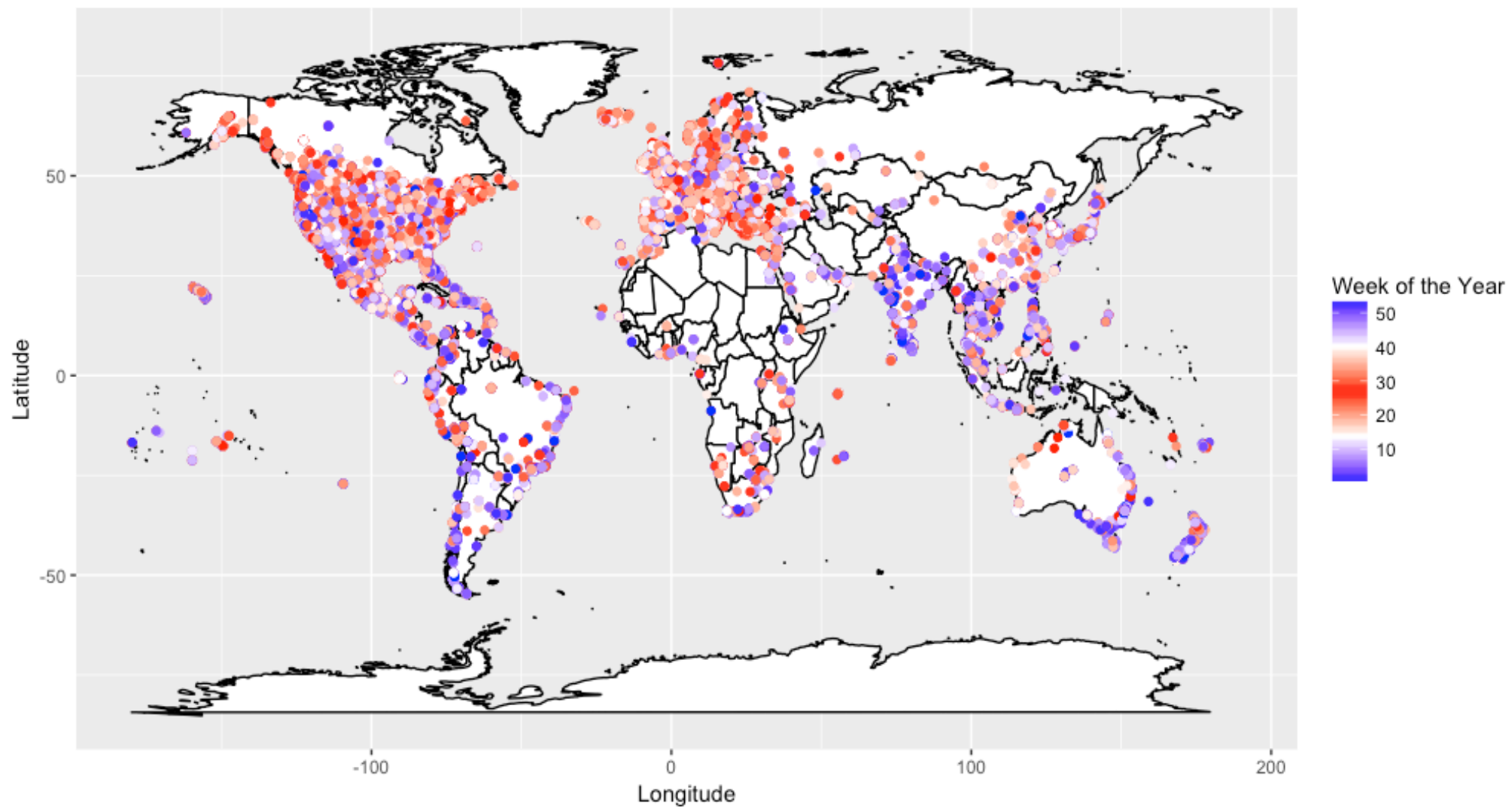
Hourly and Daily Booking Probability by Travel Category



Plan Time and Booking Probability by Travel Category



US Booked Destinations, by Season



Summary

	Observation	Recommendation
1. Channel	The probability of booking per travel category depends on the type of channel	Better advertise effective channels per travel category
2. Booking Time	Identify per travel category: i) the most and least popular booking days of the week ii) the most and the least popular weekly booking hours	Change price and deals offers effectively, to increase the probability of booking in unpopular days/times
3. Plan Time	As Plan Time increases, the probability of booking decreases	Deals= $\frac{1}{Prob(Booking)}$ Within specific range plan-time
4. Destination	Popular places by seasonality	Better target the deals to increase the popularity of destinations by seasonality
5. Hotel Characteristics	No distinct pattern across customer type depending on Branded, star-rating, banded history price of the hotel, or package option	Not as useful to price discriminate across travel categories depending on such characteristics



Questions?