

DataFest 2017 Write-Up

Our Question

Our team was interested in discovering what the most popular domestic travel destinations were within the U.S. booked using Expedia (measured by hotel bookings). We narrowed our focus by subdividing our data, allowing us to observe the most popular travel destinations by state. If there are variations between the states' popular travel destinations, what might account for these differences?

Our Method

We started off with an inner_join of the “clicks” data and the “destinations” data using the search_destination_id as the common link. After, we filtered out specific columns we wanted to keep, such as user_location_country, user_location_region, srch_destination_latitude, srch_destination_longitude, orig_destination_distance, srch_destination_id, srch_destination_name, and Is_booking.

We then filtered so that only the clicks that led to a booking were kept (Is_booking = ‘1’) and where the user was located within the United States.

Next, we found the top five travel destinations for each state. After that, we used a left join to add our top five destinations data with a condensed version of the destinations data that retained the latitude and longitude (these are needed for our visualization). After the join, we filtered for 5 states in order to create a few visualizations. We created a map with points of the top 5 locations people from these states booked hotels in. The observed state is highlighted blue, and the sizes of the orange dots are reflect the number of people that booked a hotel in that location.

Our Findings

From our analysis, our findings demonstrate that the top domestic travel destinations within the U.S. are located in the same state the Expedia user booked his/her hotel in. Across the board, however, a majority of states shared the top travel locations of Las Vegas and New York City. These were surprising results, as one would typically assume that when booking a hotel, a person would choose to travel farther from home for the quintessential vacation experience.

Implications of Our Findings

While our results were surprising, further analysis could illuminate the reasons why Americans appear to be so travel averse (except for when it comes from Las Vegas). Firstly, the U.S. provides less vacation time than any other developed country in the world. With an average of 10 days of vacation days per year, for the typical American, it would be much easier to vacation within your state. Accepted as a fact and a trend, Expedia could focus business on states with geographic, climate, and recreational diversity.

Additionally, many of our observations could be those travelling for business. Typically, individual businesspeople with expense accounts do not book their own flights, but have companies that make their reservations. Expedia could focus on forming partnerships with booking companies.