

## Hotspots & Notspots

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Conversion rate from traffic into sales is one of the most important factors to consider when analyzing a business website. Our goal for the project was to identify the destinations with the highest and lowest conversion rates to see if we could identify any trends in the data.

Our approach to the process was to first look at the clicks.csv data set because we wanted to look at specific destinations, and therefore needed enough data for each destination location. For the same reason, we filtered out destination\_ids where the total number of times it was clicked on or booked was greater than 200. This ensured that the conversion rate we would then derive would be a significant number, and the set of conversion rates wouldn't be skewed by any extremely small samples. The actual conversion rate was calculated by taking the total number of bookings over the total number of clicks for each destination.

We then took the top 10% and the bottom 10% of our results and visualized it in a heat map. The median conversion rate for the bottom 10% was around 4%, meaning there were only 4 actual bookings made for every 100 clicks at that destination. We also noticed that these destinations were all classic vacation hotspots—located in warmer areas near the coast—including Cancun, Honolulu, and the South Sri Lanka Coast. On the other hand, the median conversion rate for the top 10% was around 28%. These destinations were almost entirely within the US, usually in a suburb right outside a major city.

With the result of our data, we can suggest some ways to improve conversion rate, knowing which locations are the most popular and need the most improvement. Trying to promote more sales in the bottom 10% destinations if possible and placing them in prominent areas on the site could help boost sales. Alternatively, perhaps there should be flash sales on low conversion rate places to try to get people to follow their dreams.