



NYU

TANDON SCHOOL
OF ENGINEERING

Harriott Hotels Analysis

Yiming Ge

General Data Summary

568 M

Total revenue from 2014 to 2016 is 568 million. 1.22 million transactions in total..

100 K

Total guests are 100 thousand. 40% are female(40.07K) and 60% are male (59.93K).

3 days

Average stays for each costumer is almost 3 days (2.7 days)

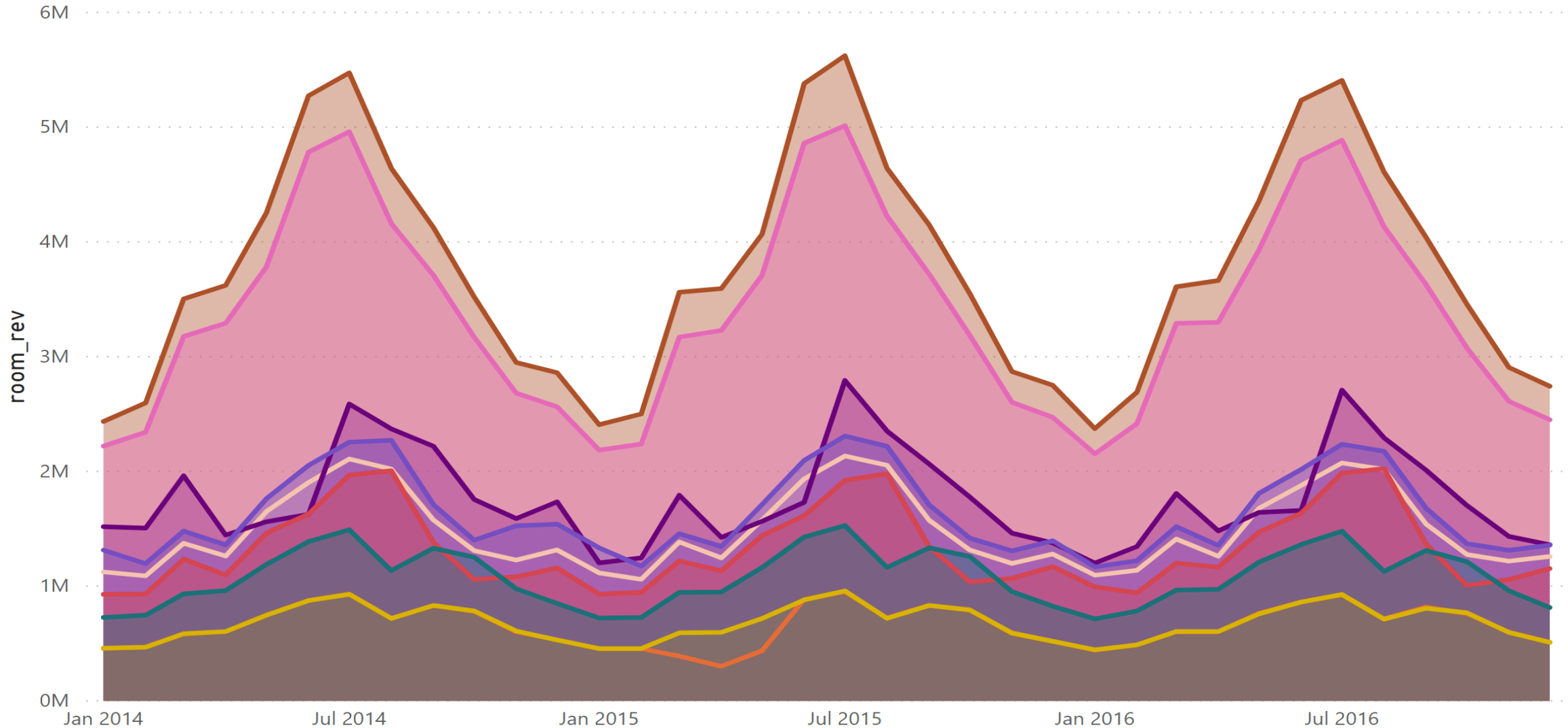
87K

Costumers' average household income is 86.74 thousand (higher than US HHI median 59 thousand) and the avg. NPS is 7.59

Revenue Trend

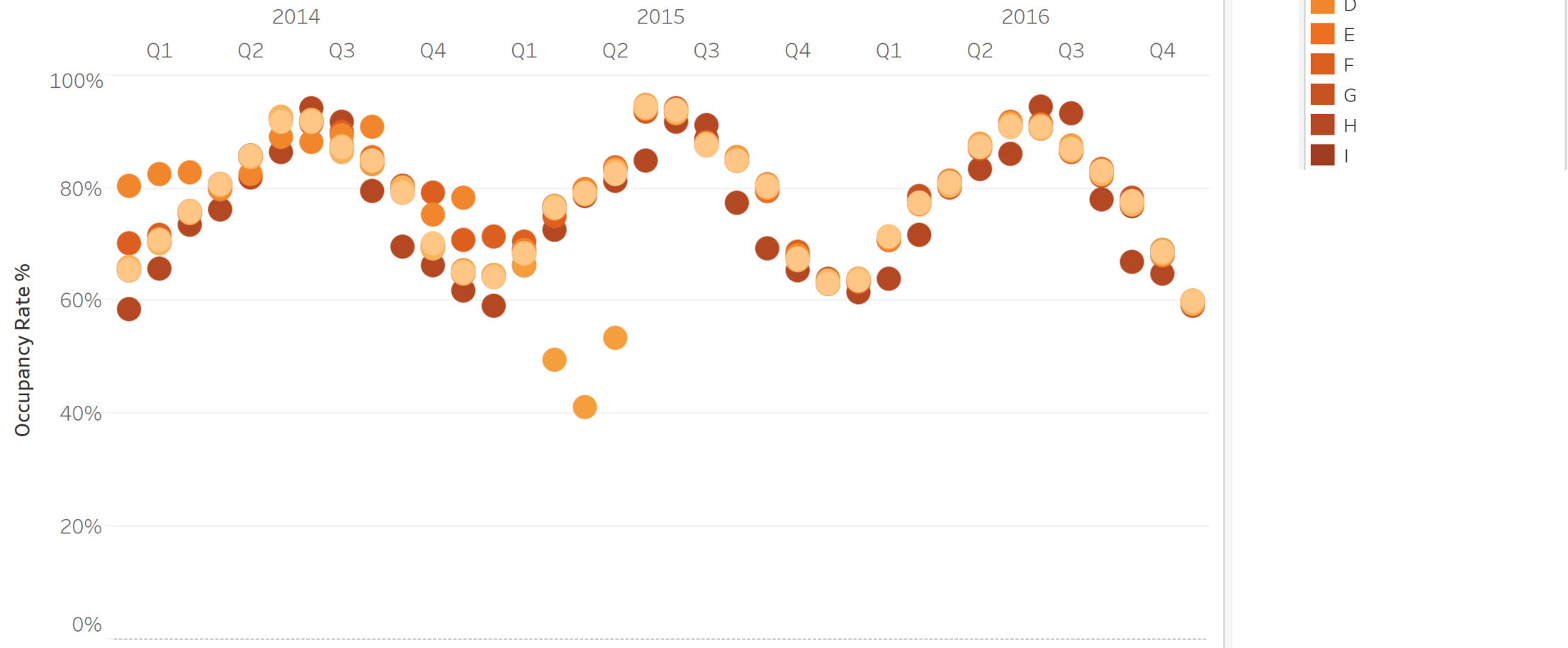
A and E hotel have very large amount of revenue and all 9 hotels have same revenue trend

Hotel ● A ● B ● C ● D ● E ● F ● G ● H ● I



Occupancy Rate

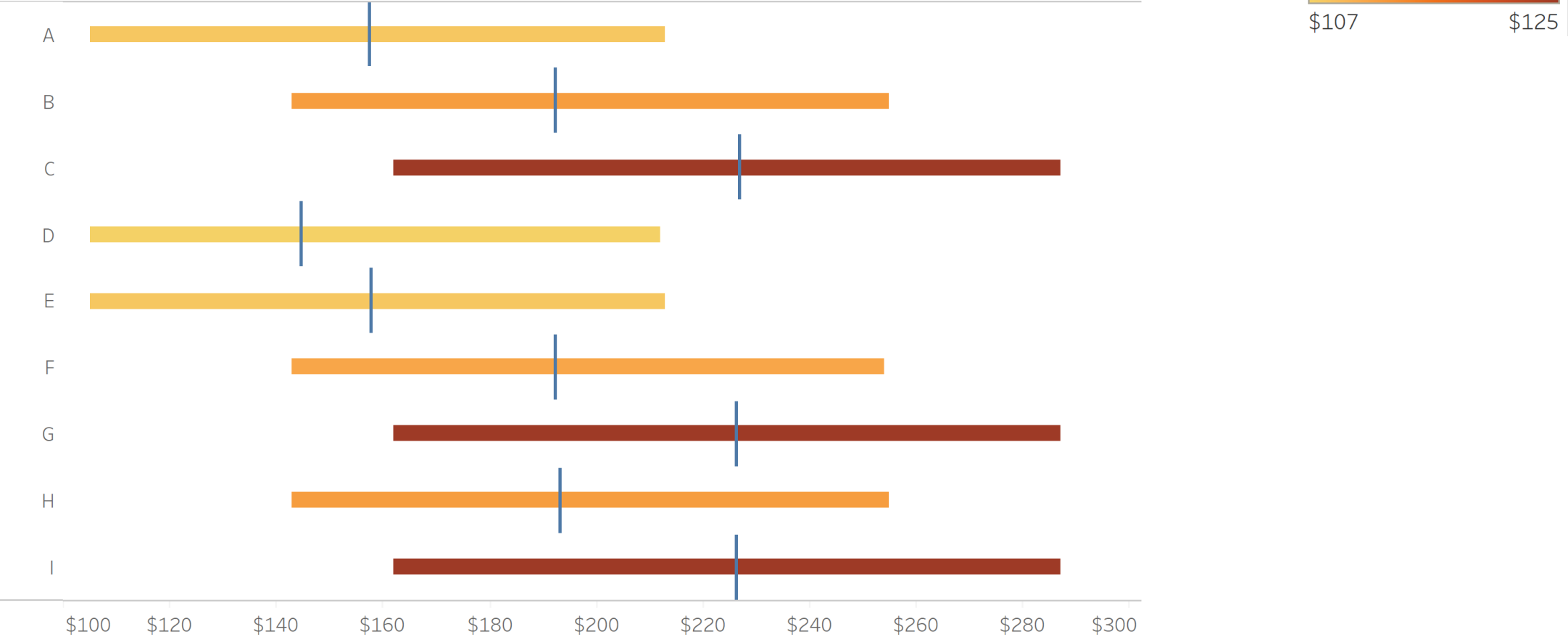
Seasonality. High occupancy rate in Summer and Fall and low occupancy rare in Winter and Spring.





Room Night Pricing

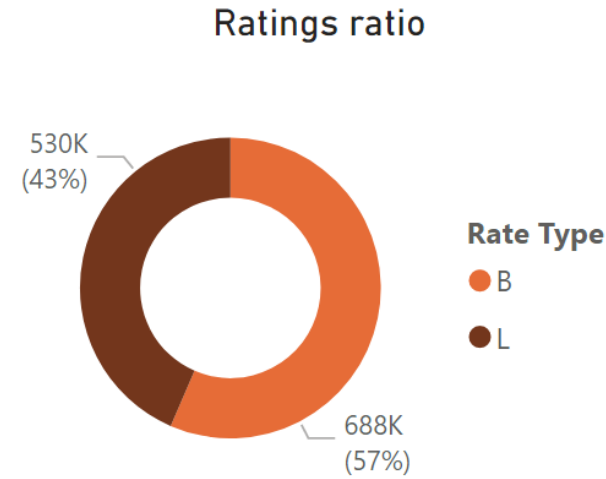
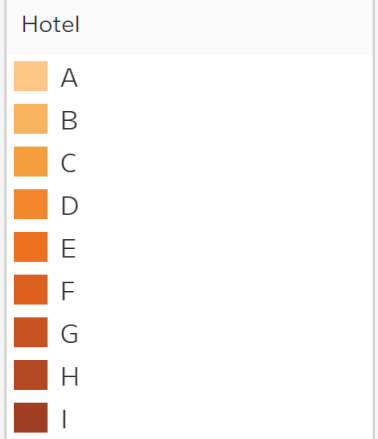
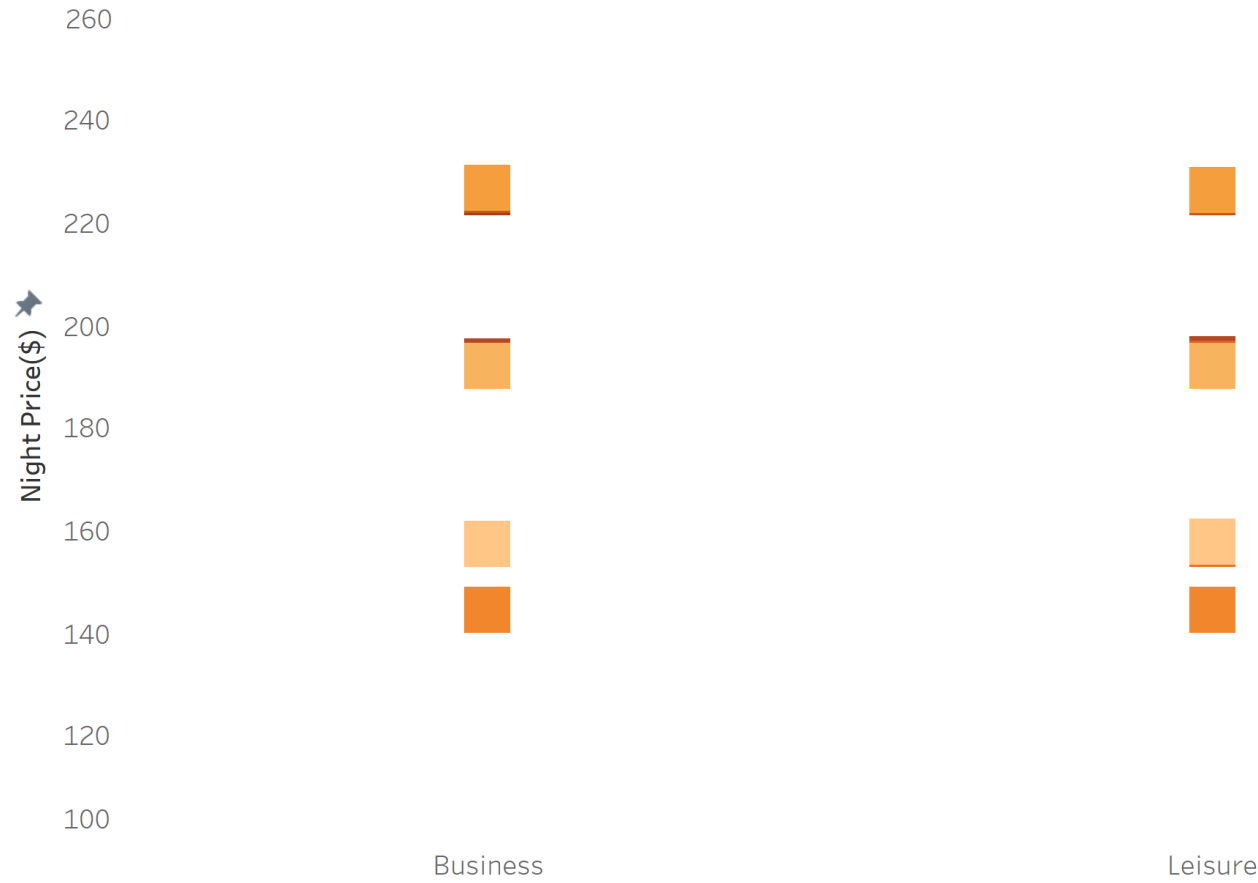
Hotel C,G and I have relatively higher room night price and range in these 9 hotels





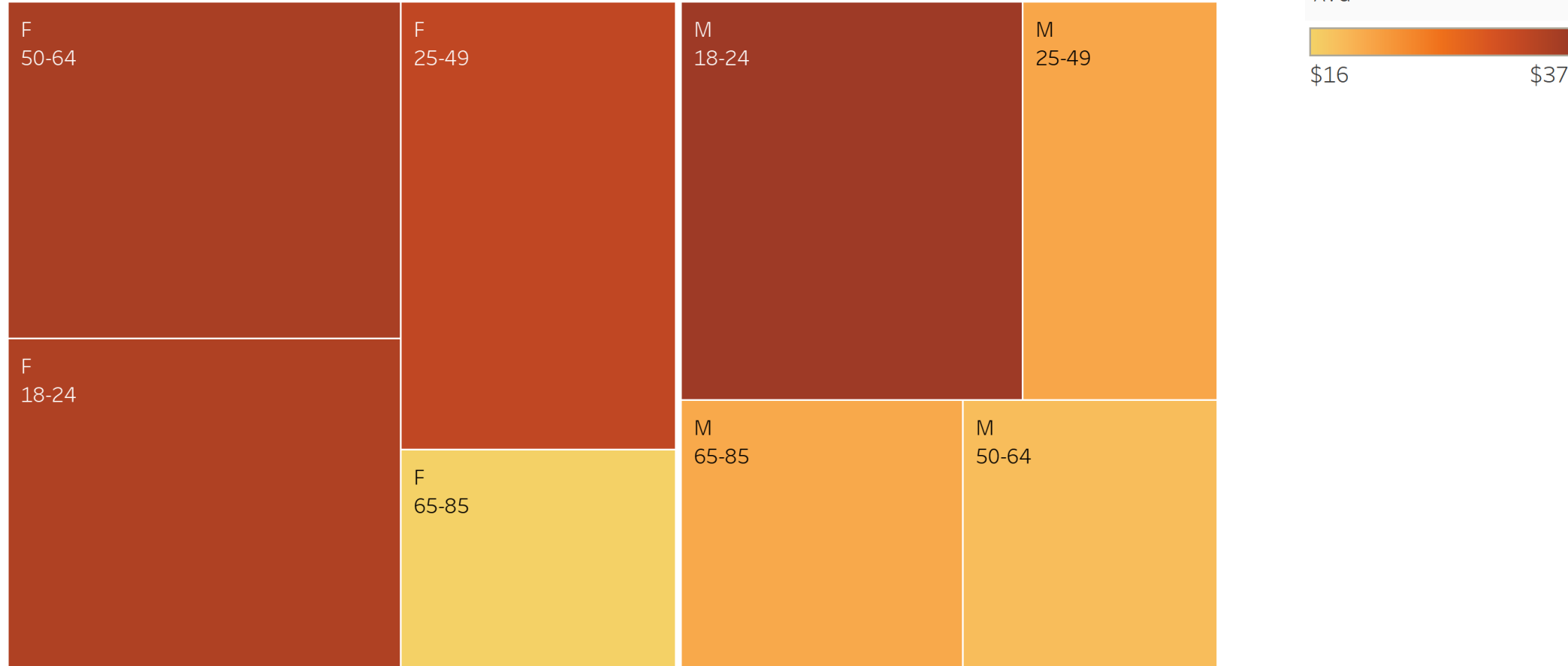
Business vs Leisure

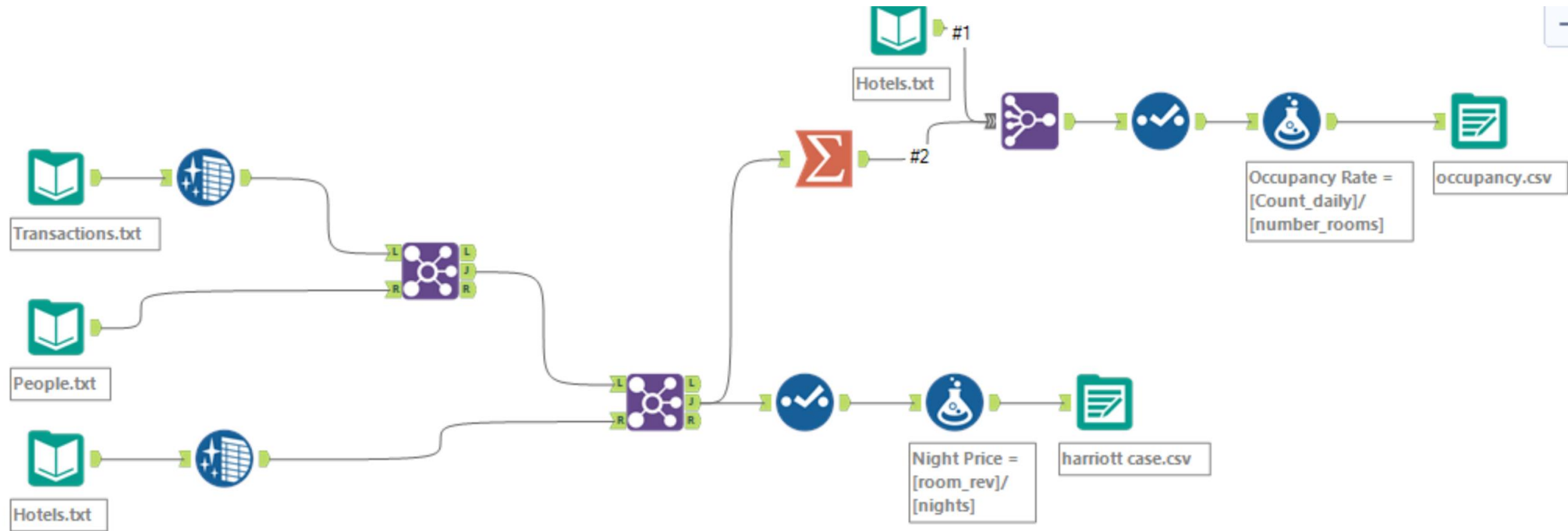
Night Price is almost same between Business and Leisure



Amenity Revenue

Old people would like to spend less in amenity.





1. Clean Nulls in both Hotels and Transactions data.
2. Join people and transactions with person_id, then join with Hotels with hotel_id.
3. Change String to Double and use room_rev/nights to calculate night price.
4. Count trans_id and group by checkin and hotel_id to get Count_daily.
5. Change String to Double and use Count_daily divided by number_rooms to get Occupancy Rate.