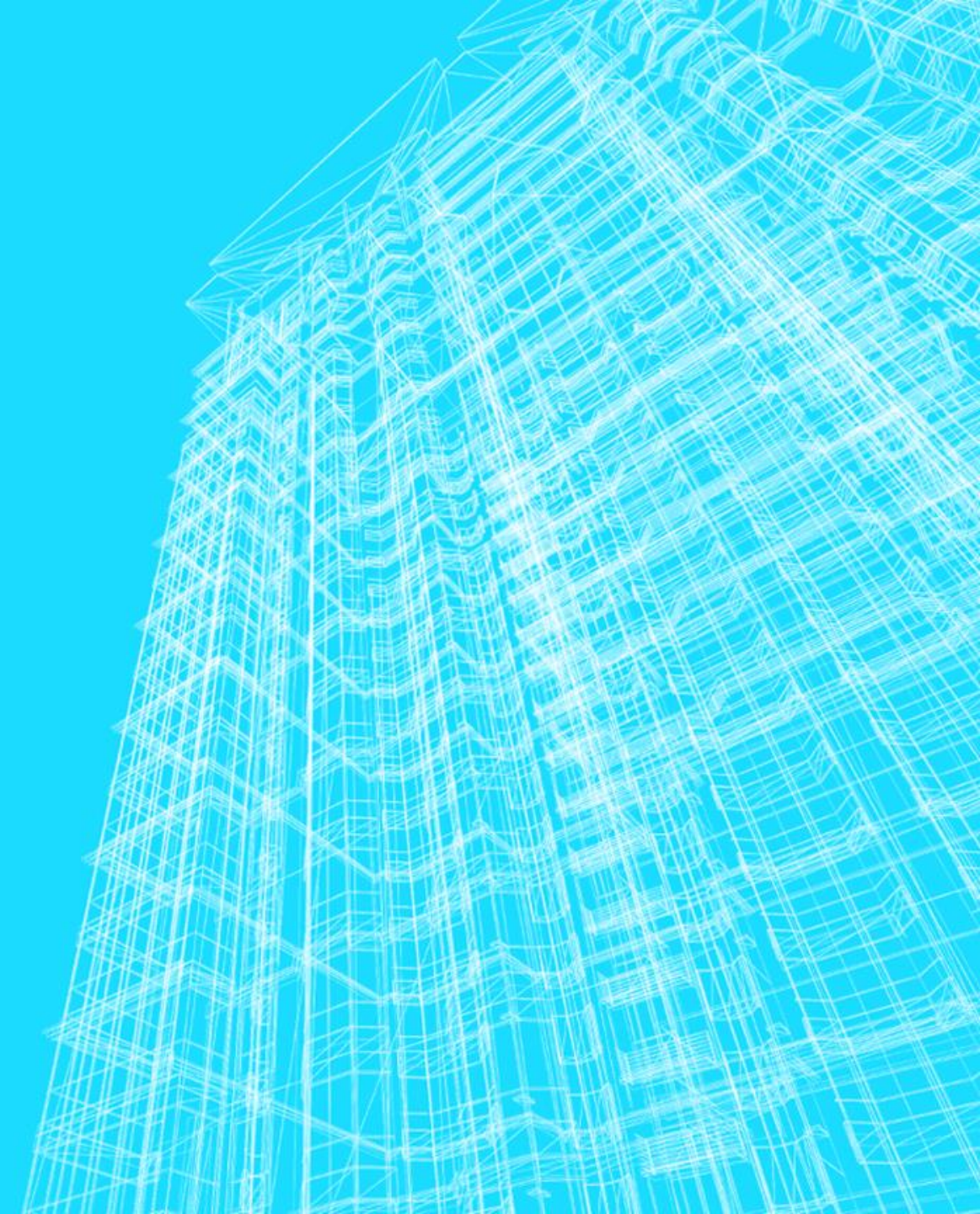
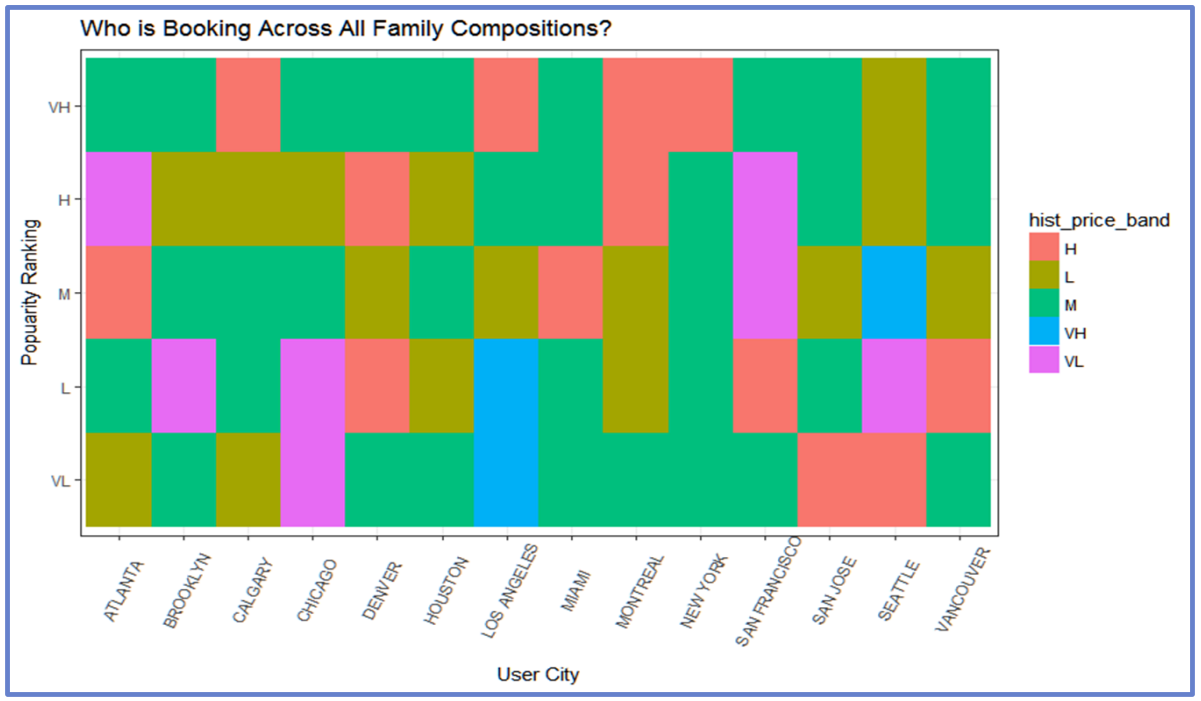
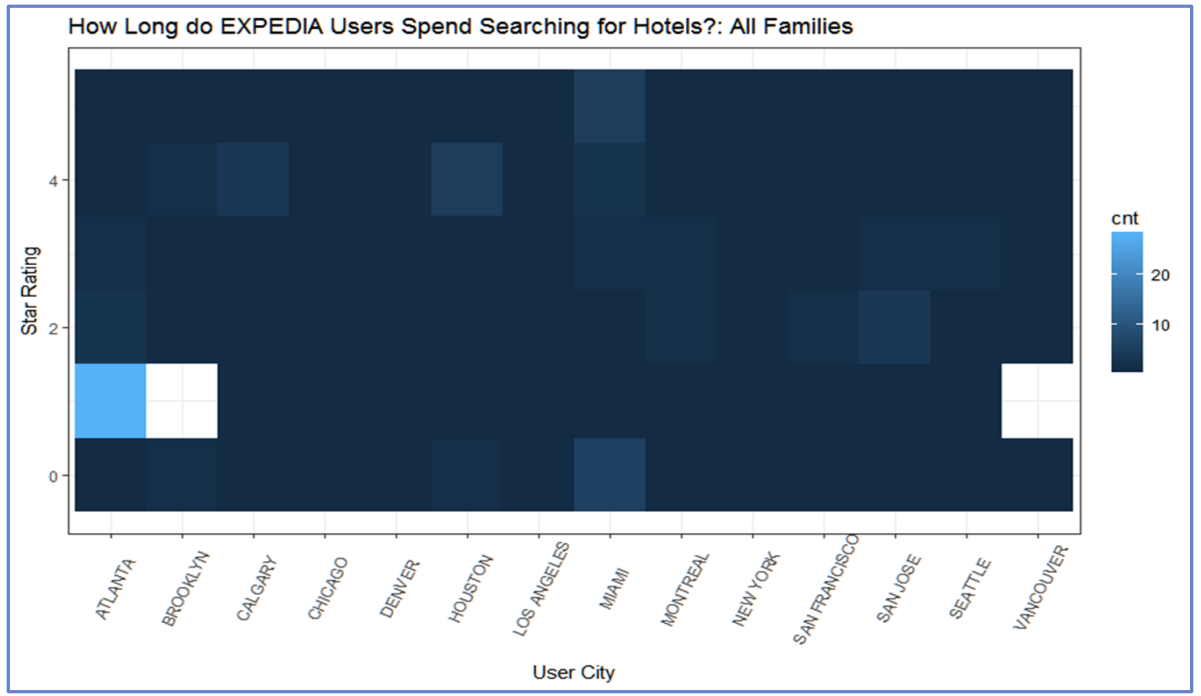
Increasing EXPEDIA's Bottom Line: Leveraging Packages to Increase Commission

An approach presented by:
Aumit Leon
Brendan Murphy
John Bowllan
and Jay Silverstein



Hive Mind Analytics





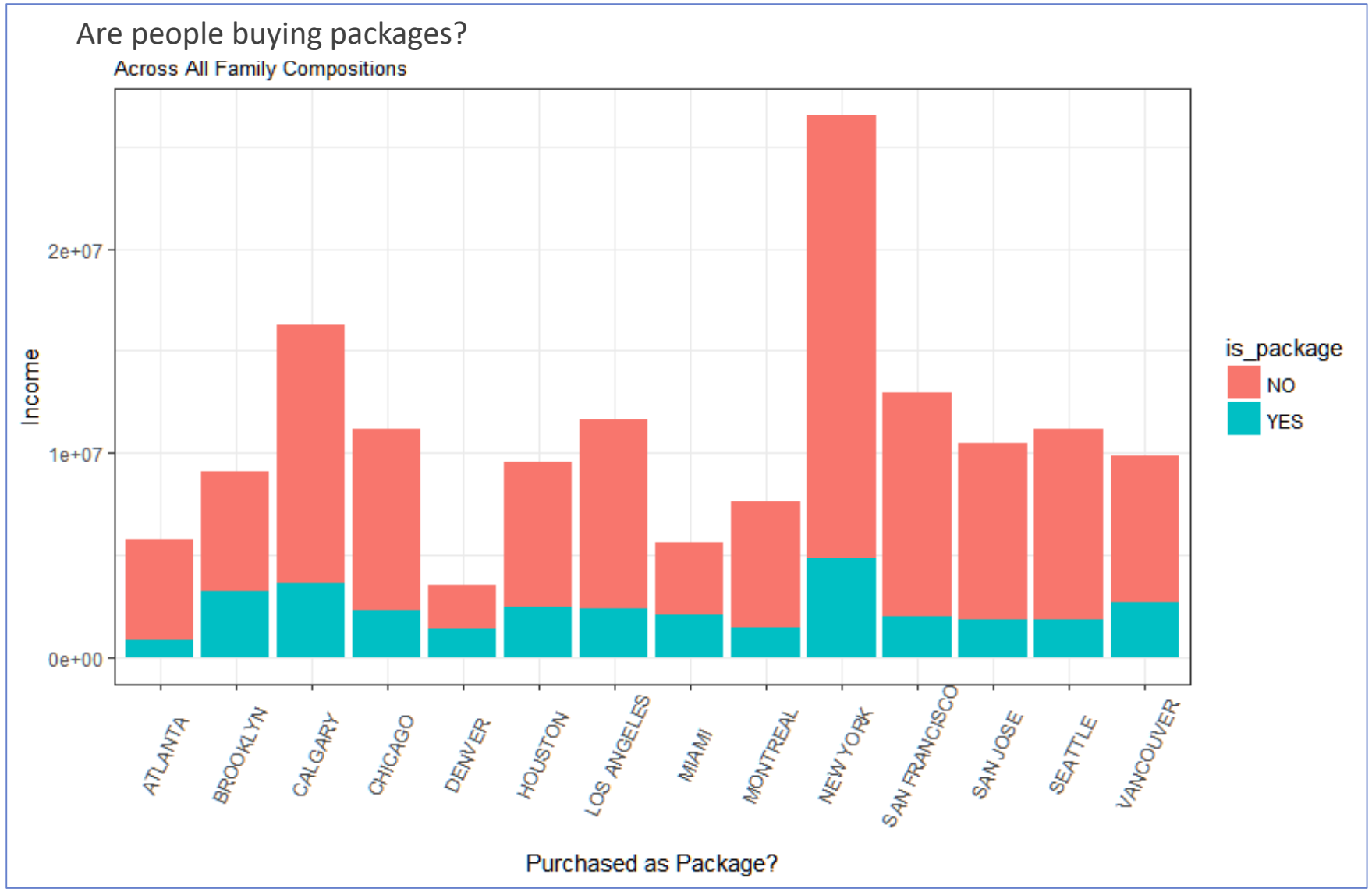
DEMOGRAPHICS

Heatmapping used to compare three values isolated to give us a clear picture of

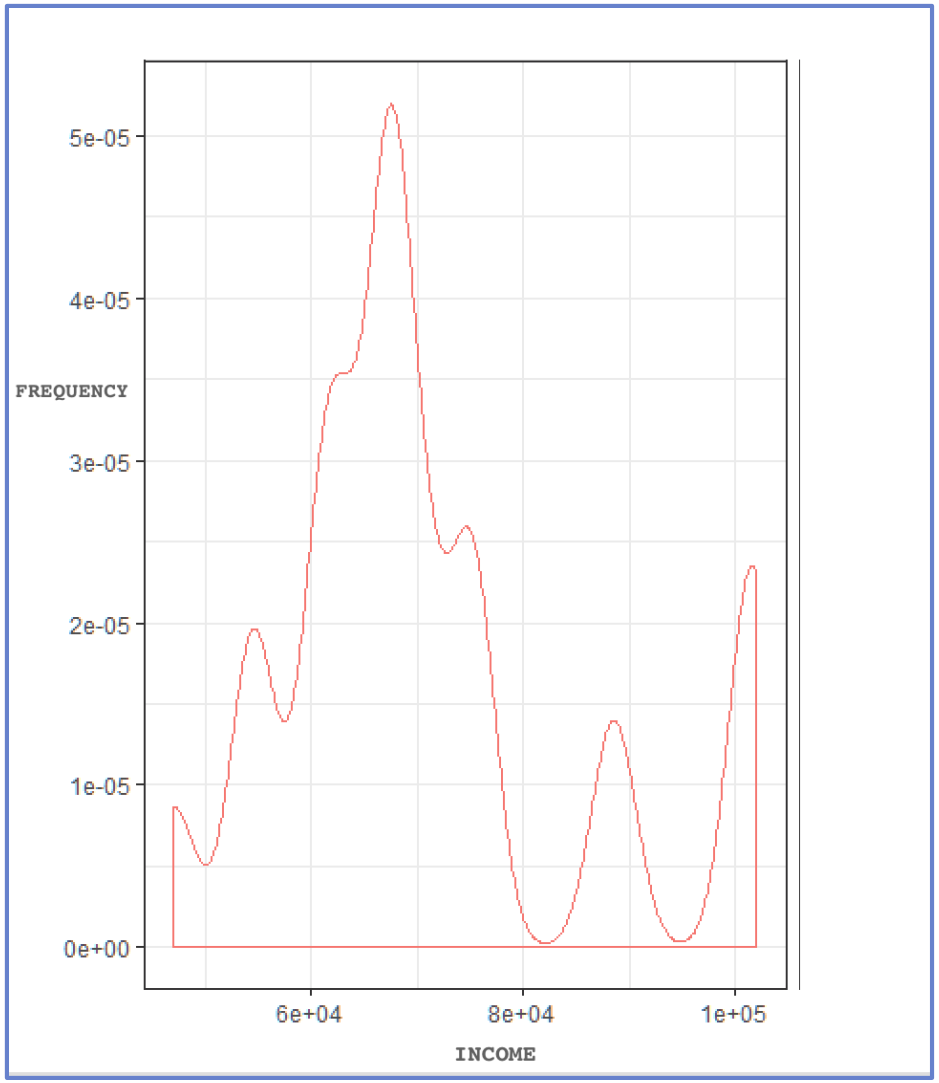
1) Which sector of the market should be targeted
2) How long the targeted customer group will spend on the site

Is there an under-purchased product that we can market immediately?

Are people buying packages?



WHO BUYS PACKAGES?



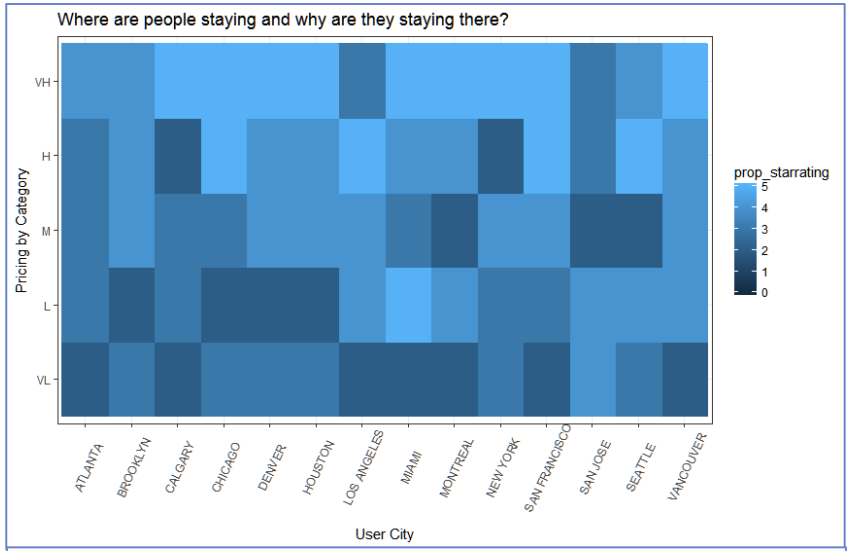
Kernel Density Estimation function:
For each income value, how many people are buying packages without introducing "premium packages"

Hive Mind Analytics

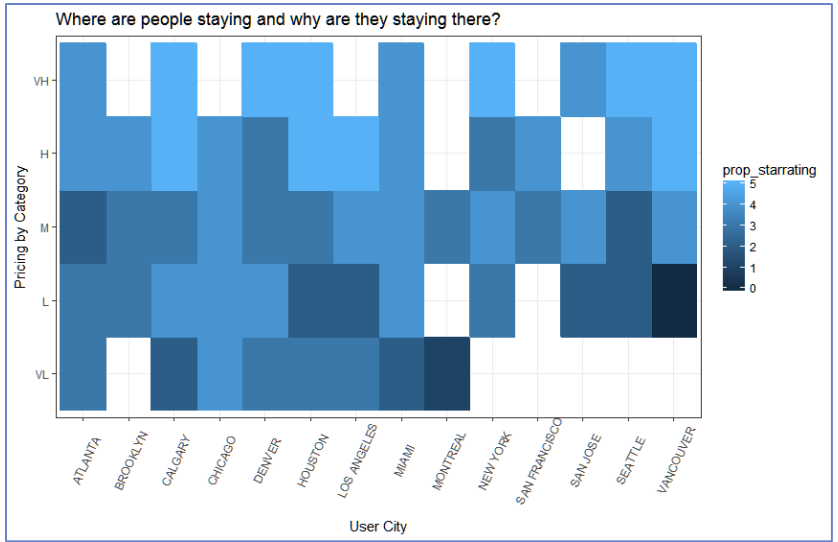
PRICE, CITY, AND STAR RATING

Determinants of where people stay that can be morphed into tiered package structure

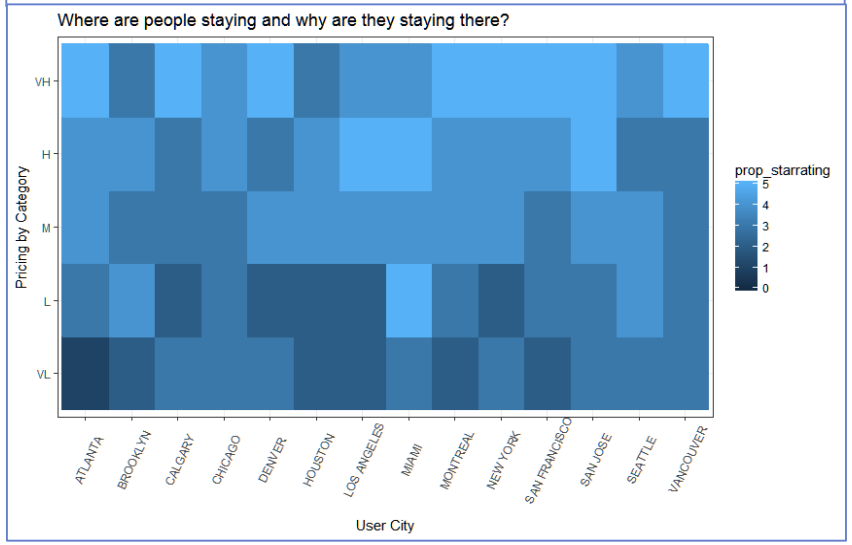
1



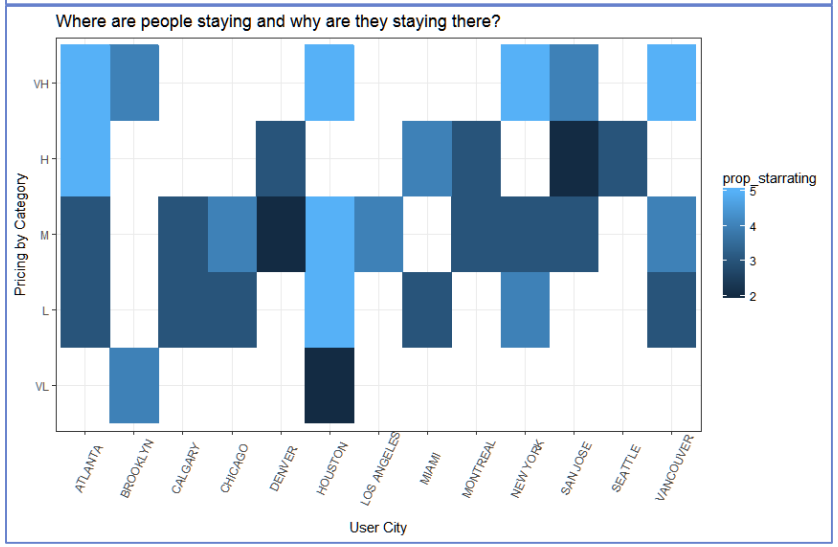
2



3



4



EXECUTIVE SUMMARY

- Lower income to average income family compositions are booking packages more frequently than higher income compositions
- A significant portion of the customer base is being missed
- Higher income compositions will buy a “premium package”
- “Premium package” includes higher rated hotels, nicer car rentals and more expensive airfare
- Actionable items for further analysis: where do transactions take place, mobile or web-based?

Hive Mind Analytics

THANK YOU FOR YOUR TIME AND ATTENTION

- In the interest of providing reproducible research, all of our code has been uploaded to Github:

https://github.com/AumitLeon/DataFest2017