Client: Etsy

Problem: How can Etsy help shop owners increase user engagement via app, and utilize all of the features on its platform to drive sales.

General questions:
- Does shop location matter
- How is free shipping determined
- How are ratings displayed in category UI
- Who is shop owner full time/ part time
- Do admirers (followers) increase reviews/sales of shop

Questions Sales vs Active listings:
- What price points do well with active listings
- Do shops that organize their active listings by category do better than ones that do not
- Do shops with less active listings do more custom orders

Questions Sales vs Number of Reviews:
- What are reviews based on, is it overall or categorical
- Do reviews help overall sales
- How do sales help a shop move up in the main UI vs categorical UI

Impact Hypothesis: Understanding the types of shop types and owners on Etsy will allow Etsy to outreach to each with a strategy tailored to each shop.

Dataset:
https://www.kaggle.com/snowwlex/etsy-shops

Features:
- 2019 Etsy Seller Accounts
- Number of Sales
- Active Listing Count
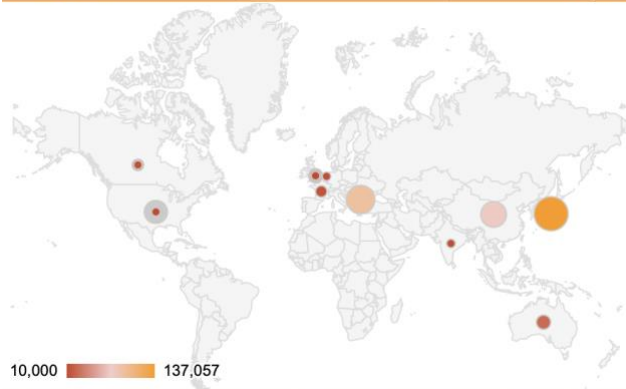- Number of Reviews
- Review Ratings

Preliminary Analysis:

- Will Etsy App increase in popularity if we can increase shop to customer engagement, can we increase e-commerce app to top 5 most popular
- Active listings do not help number of sales
  - UI shows top shops that have well organized active listings by category have high # of admirers/ reviews
- Customer reviews are anywhere from 5% to 28% of average number of sales, no definite relationship between sales/reviews *by location*

Most popular e-commerce apps in the U.S. 2019, by reach (Source: Verto Analytics)		
Most popular mobile shopping apps in the United States as of September 2019, by reach		
1	Amazon (main)	80.64 in %
2	Walmart (main)	46.08 in %
3	eBay (main)	33.28 in %
4	Ibotta	25.2 in %
5	Target (main)	24.31 in %
6	Groupon (main)	18.75 in %
7	**Etsy**	**17.21 in %**
8	The Home Depot	16.13 in %
9	Wish (main)	14.81 in %
10	Best Buy (main)	14.01 in %

Seller_Country	AVERAGE of % Customers Leaving Reviews
Australia	23%
Bulgaria	21%
Canada	28%
China	5%
England	16%
France	24%
India	21%
Japan	27%
The Netherland	21%
United States	24%
Grand Total	**23%**

Seller_Country	Seller_City	AVERAGE of Number_of_Sales
Total		28,026
Australia Total		26,683
Bulgaria Total		*88,437*
Canada Total		15,960
China Total		*77,145*
England Total		15,560
France Total		14,747
India Total		11,798
Japan Total		*137,057*
The Netherlands Total		12,059
United States Total		23,960
Grand Total		**26,878**

10,000 ▬ 137,057

Seller_Country	Seller_City	AVERAGE of number_of_reviews
Australia Total		**6,031**
Bulgaria Total		**18,523**
Canada Total		4,582
China Total		3,804
England Total		2,341
France Total		3,467
India Total		2,465
Japan Total		**36,493**
The Netherlands Total		2,483
United States Total		5,860
Grand Total		**6,161**

2,341.25 ▬ 36,493

Google Sheets
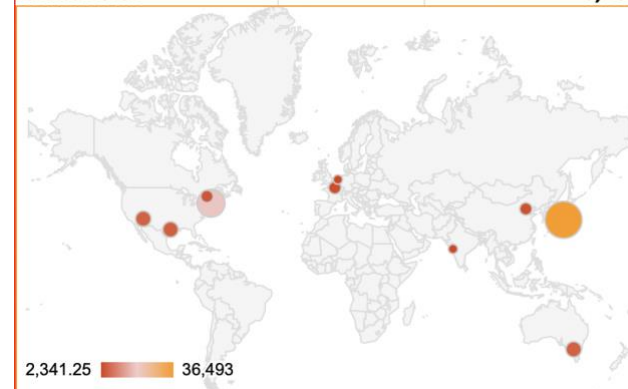
Etsy Shop Sales vs Active Listings
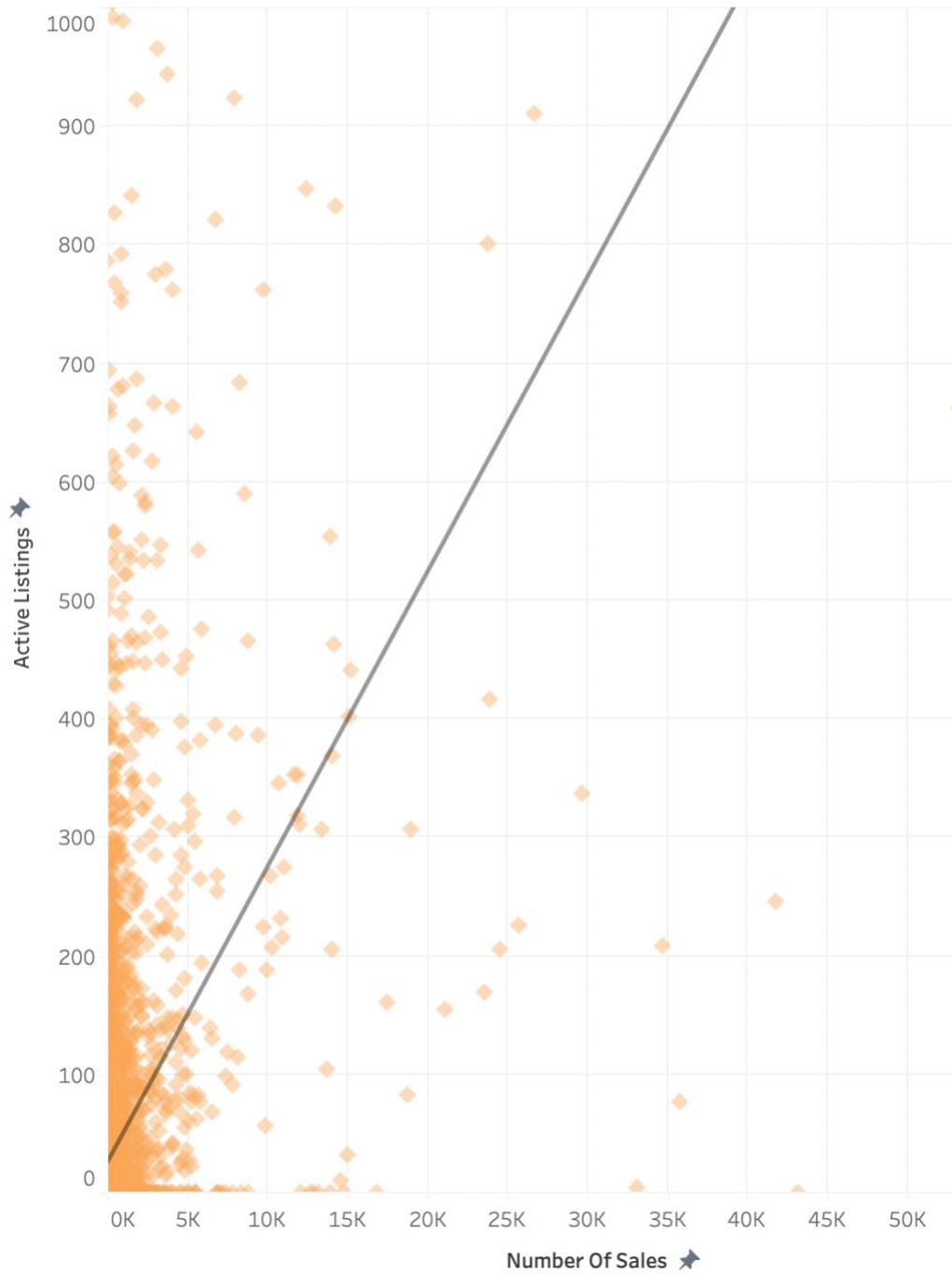
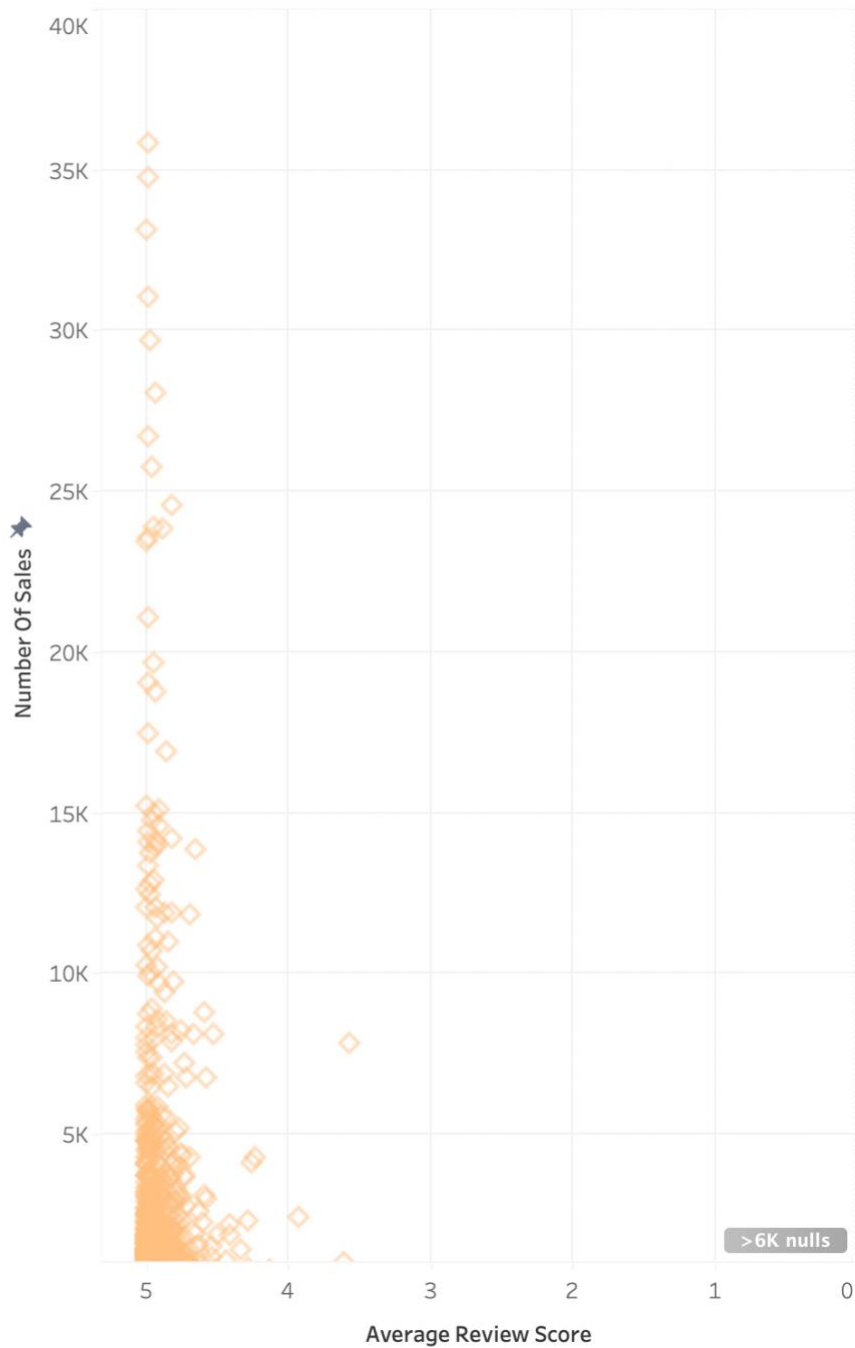## Etsy Shop Sales vs Number of Reviews
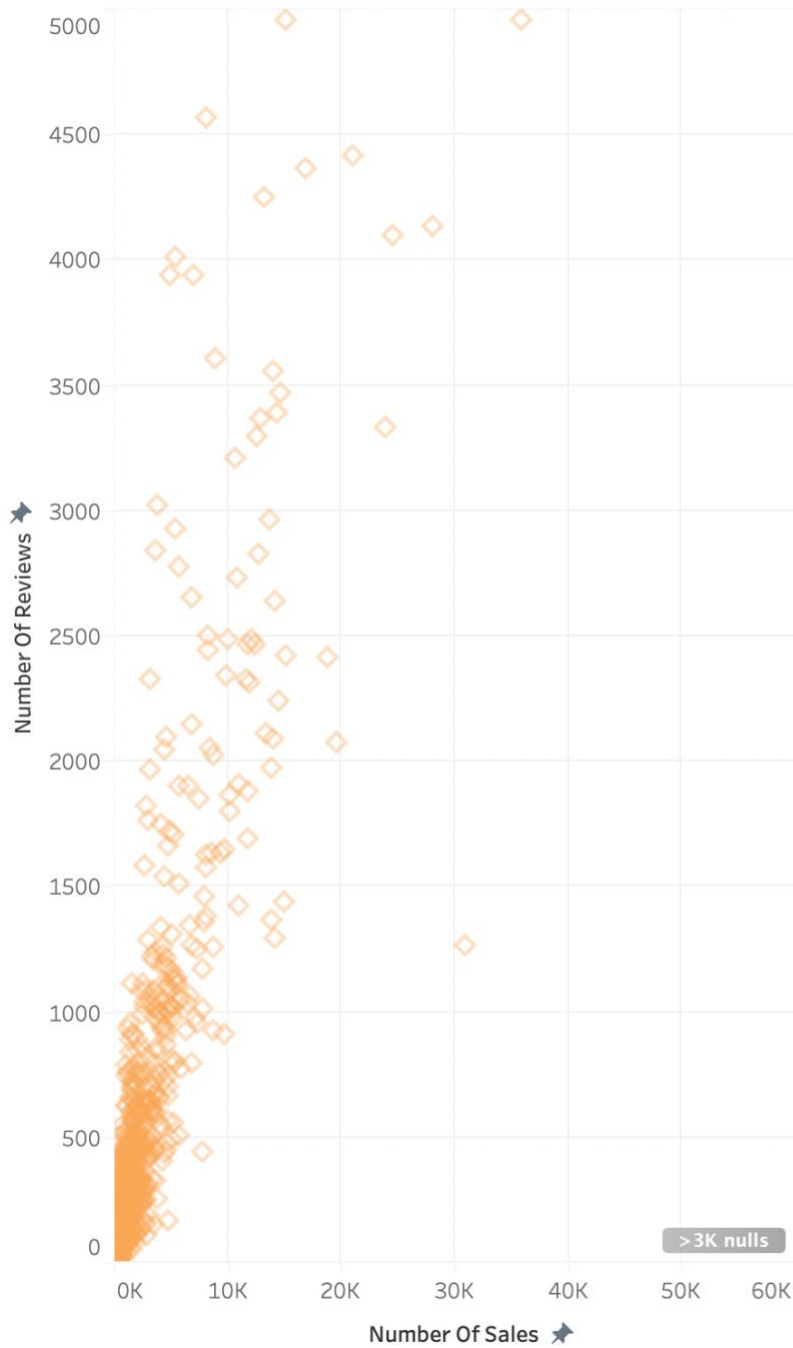
Etsy Sales vs Average Review Score

Future Analysis