

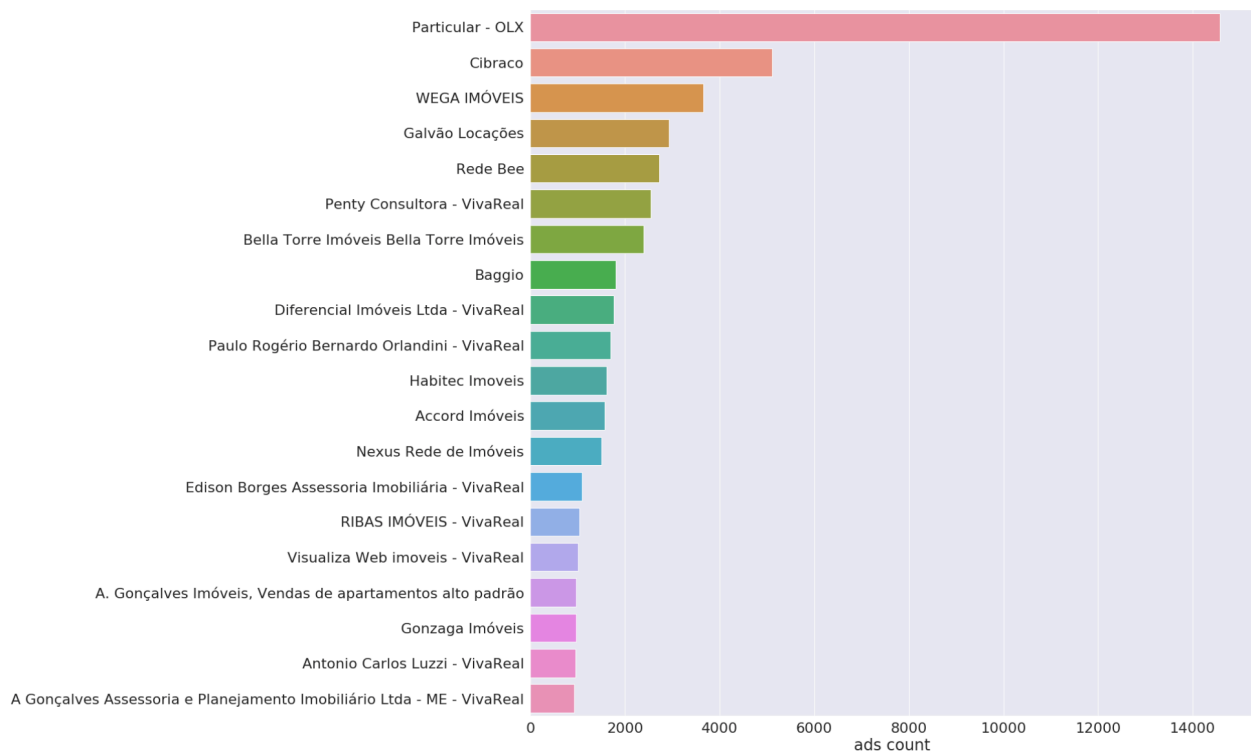
## Real Estate Ads in Curitiba Dataset

When I had observed the dataset, I decided to define the main objective before jumping through analytical processes. According to the question paper, an ads scraping company is the customer who needs a helpful guidance from us through this dataset. Throughout the brainstorming, there were two main scenarios that the company can give their customers, who work in real estate business, a service by illustrating informative patterns from the dataset. The first scenario is that the ads scraping company seems to be able to support real estate advertisers as their customers with this data, which can make one real estate advertiser stand out by possessing more competitive advantages. Second, if the company would like to run their own real estate advertising, with this information, they will be one of the most leading real estate organisations due to the understanding of their customers' need.

So, the analytic process will follow by these 2 scenarios. Let's begin!!

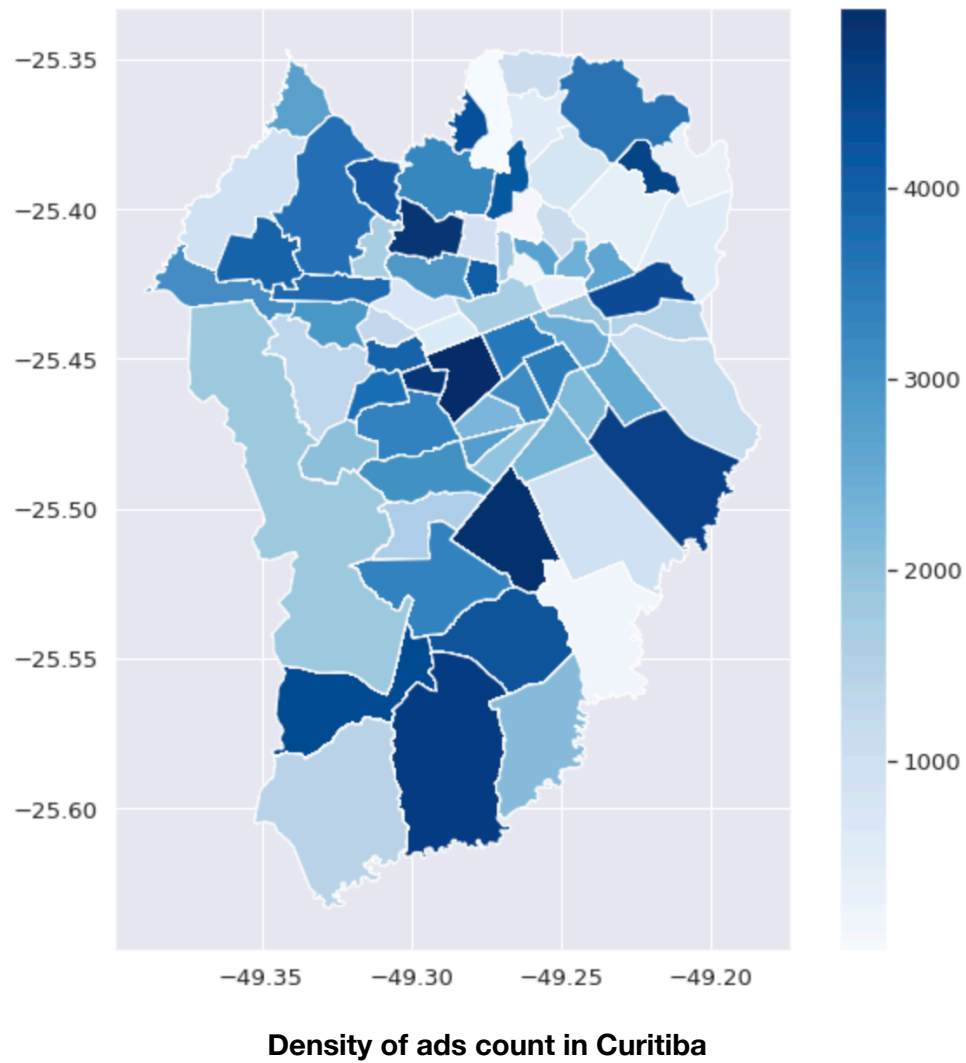
### 1. The ads scraping company is a data seller.

- Their customer should want to know who is the popular advertiser. To compete against the others company, they have to know who their competitors are. From the graph below show the advertiser who have the most ads is Particular - OLX and they look have too many ads when compare with the others.

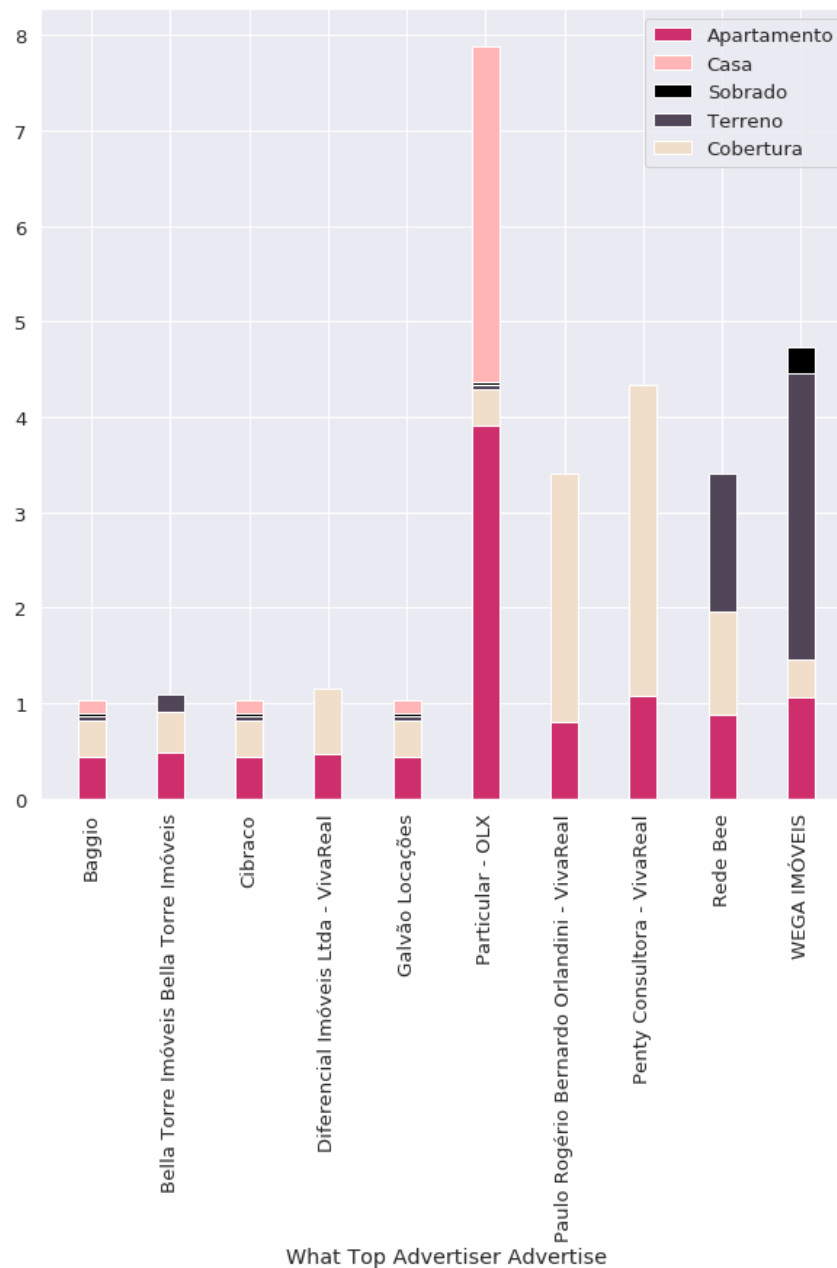


Top 20 Popular Advertiser

- From the top 20 popular advertiser, This heat map show the ads density in Curitiba. If they are the newbies in the real estate trading market, they can find the places to start a business where it have low density ads to reduce business competition and increase sales opportunities.



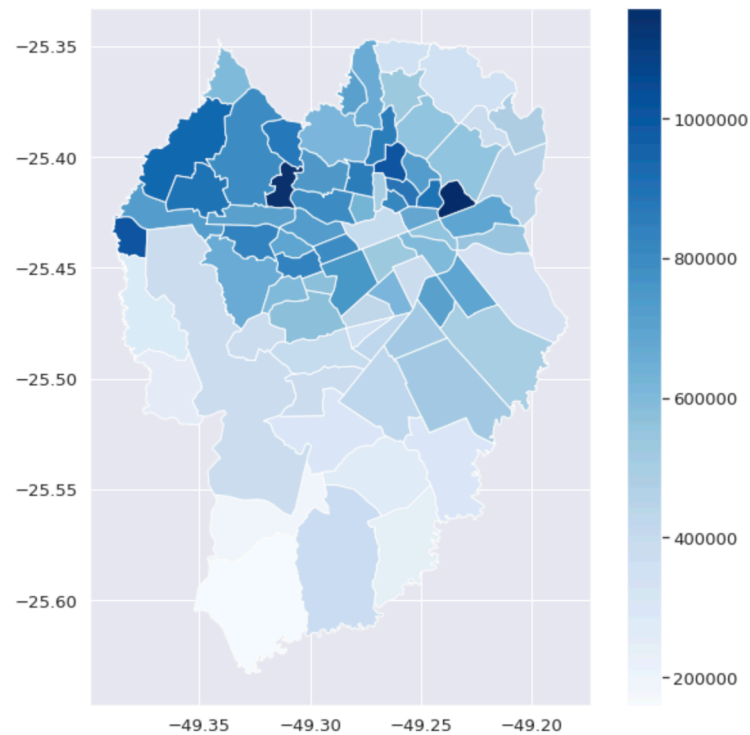
- A ratio of property type that the top advertiser company advertise their ads. A ratio of Apartment (Apartamento) is the most property type that every advertiser company sell or rent it show in pink bar and the second is followed by Coverage (Cobertura) in cream bar.



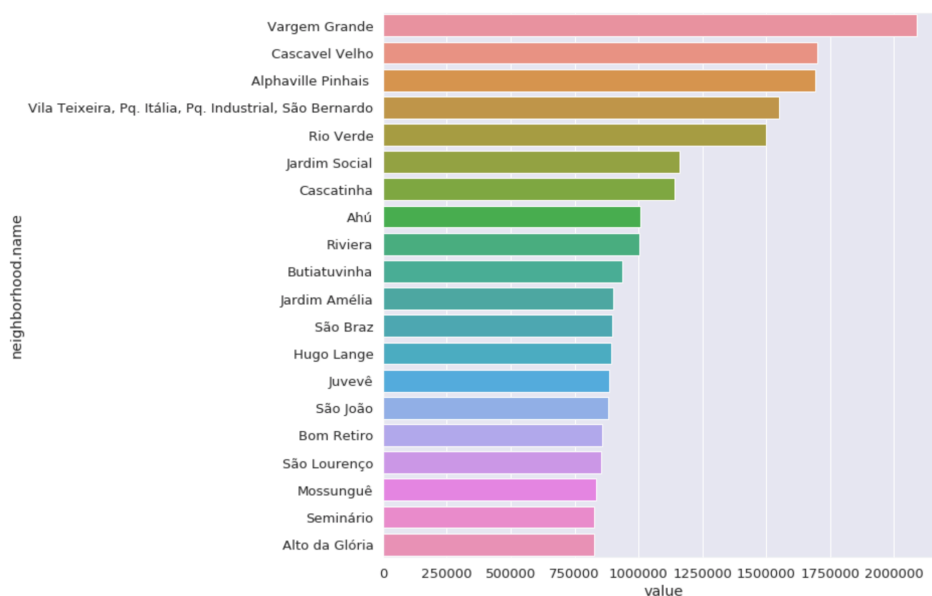
**The ratio between property type which top advertiser company advertise**

**2. The ads scraping company is the one of advertiser company. And they just want to take care their users.**

- A density of selling price in Curitiba show that the north of Curitiba has a lot of luxury estate which sell in the highly price. We can compare with a bar chart below, a bar chart show the top highly price neighbourhood name.

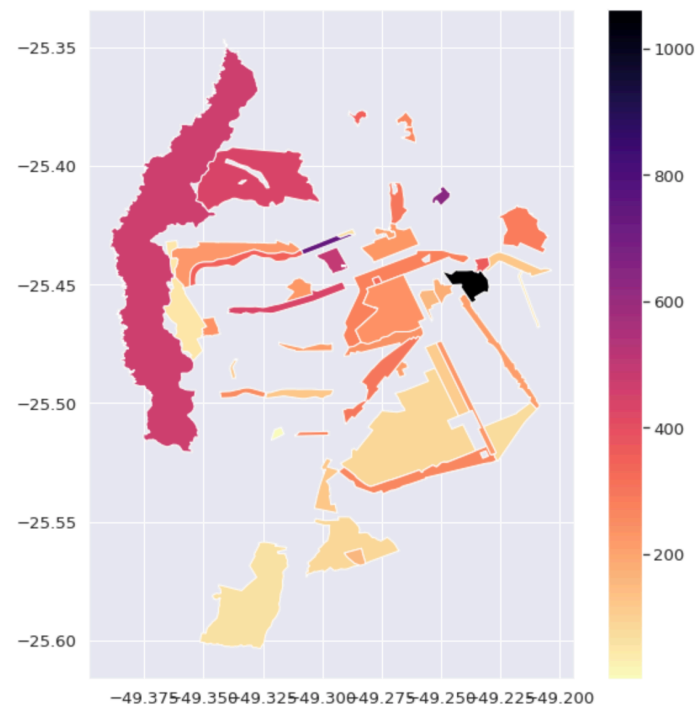


**Density of selling real estate price in Curitiba**

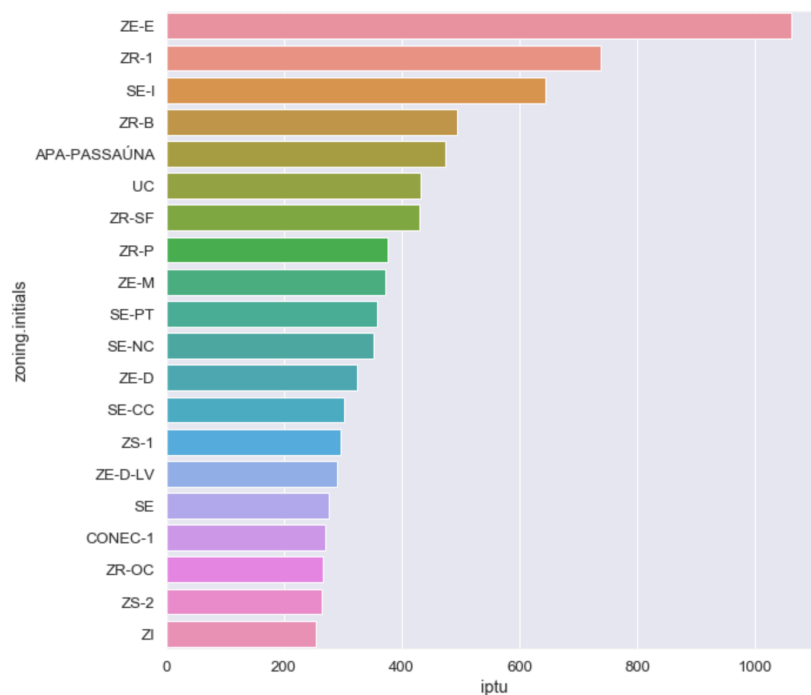


**Top neighbourhood mean average selling price**

- One thing that the person who want to buy concern and should consider before buy a new estate is the tax price. The heat map below can show high or low tax price map by zone in Curitiba. And they can also consider a top tax price sorted by name which show in the next chart.



**Tax price map by zone in Curitiba**



**Top mean average tax price group by zone**