

Travel to Ukraine with the help of Data Science

The background of the slide is a dark purple color. It features several grey paper airplanes on the left side, each with a dotted line trailing behind it, suggesting a path or trajectory. On the right side, there is a single green paper airplane. The entire content is framed by a white, hand-drawn style border.

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Introduction

Everyone loves travelling

Nowadays people like to travel to countries that weren't so popular decades ago

It takes too much time to discover where to go

Travel agencies spend a lot of money on countries investigation and exploration

Project aims to prepare informative and easy to use report about most famous and most suitable Ukrainian cities for different groups of people

Data

1

Kyiv, Lviv, Odesa, Chernivtsi,
Zaporizhia, Kharkiv

2

Arts & Entertainment, Event,
Food, Nightlife, Outdoors &
Recreation, Shop & Service,
Travel & Transport

3

Foursquare Venues API, 5km
from the city center

4

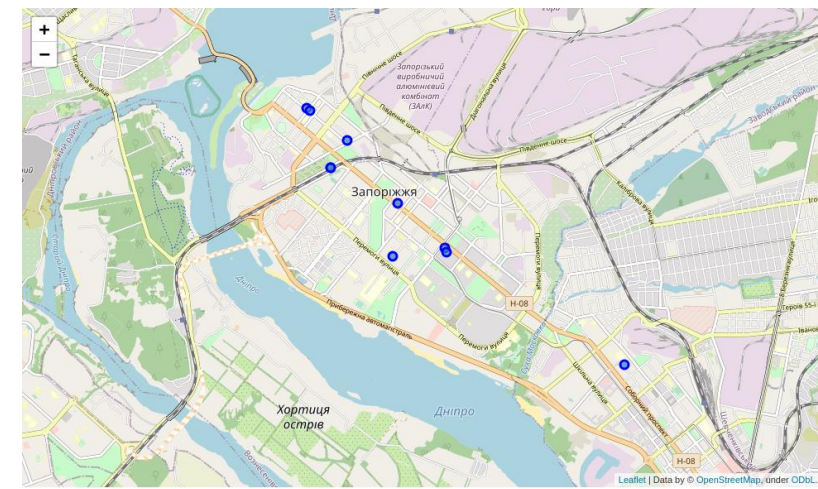
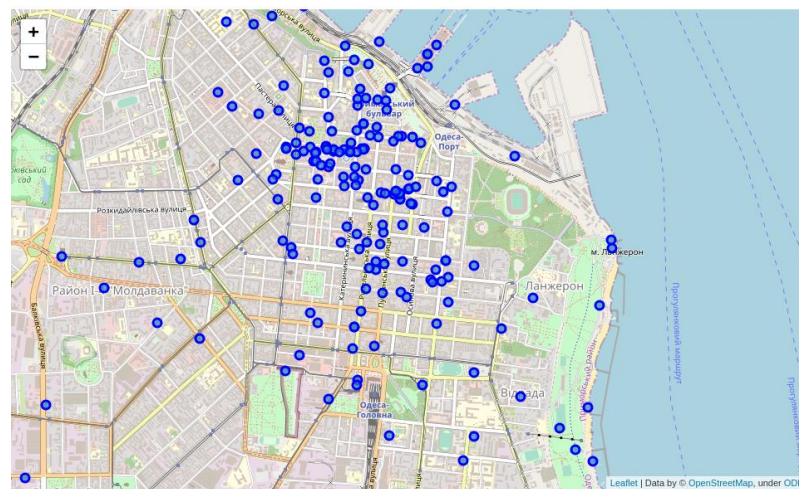
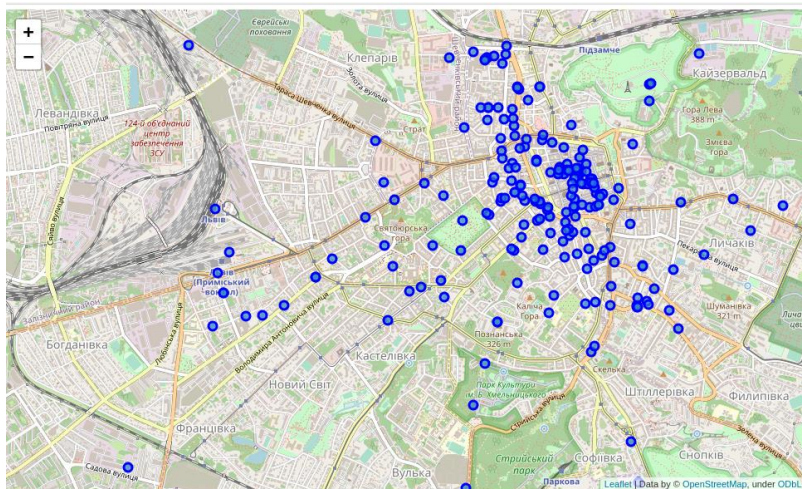
Dropped unnecessary columns;
parsed categories; data
associated to the venue

5

Data frame with 751 row and 9
columns

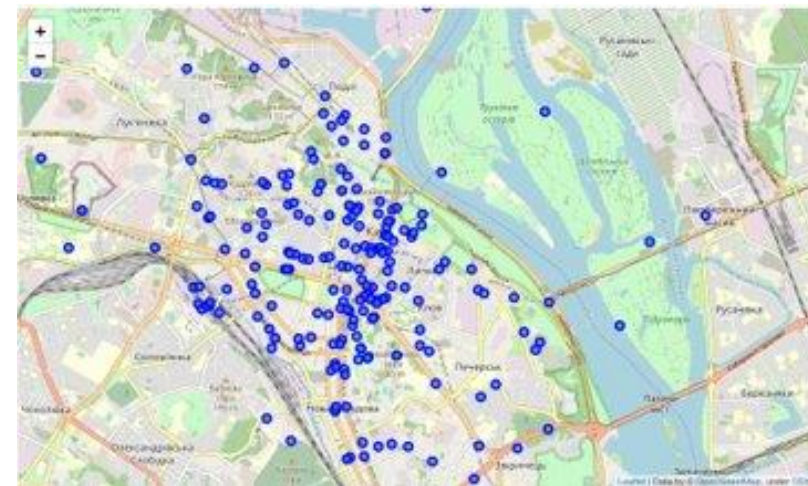
Analysis

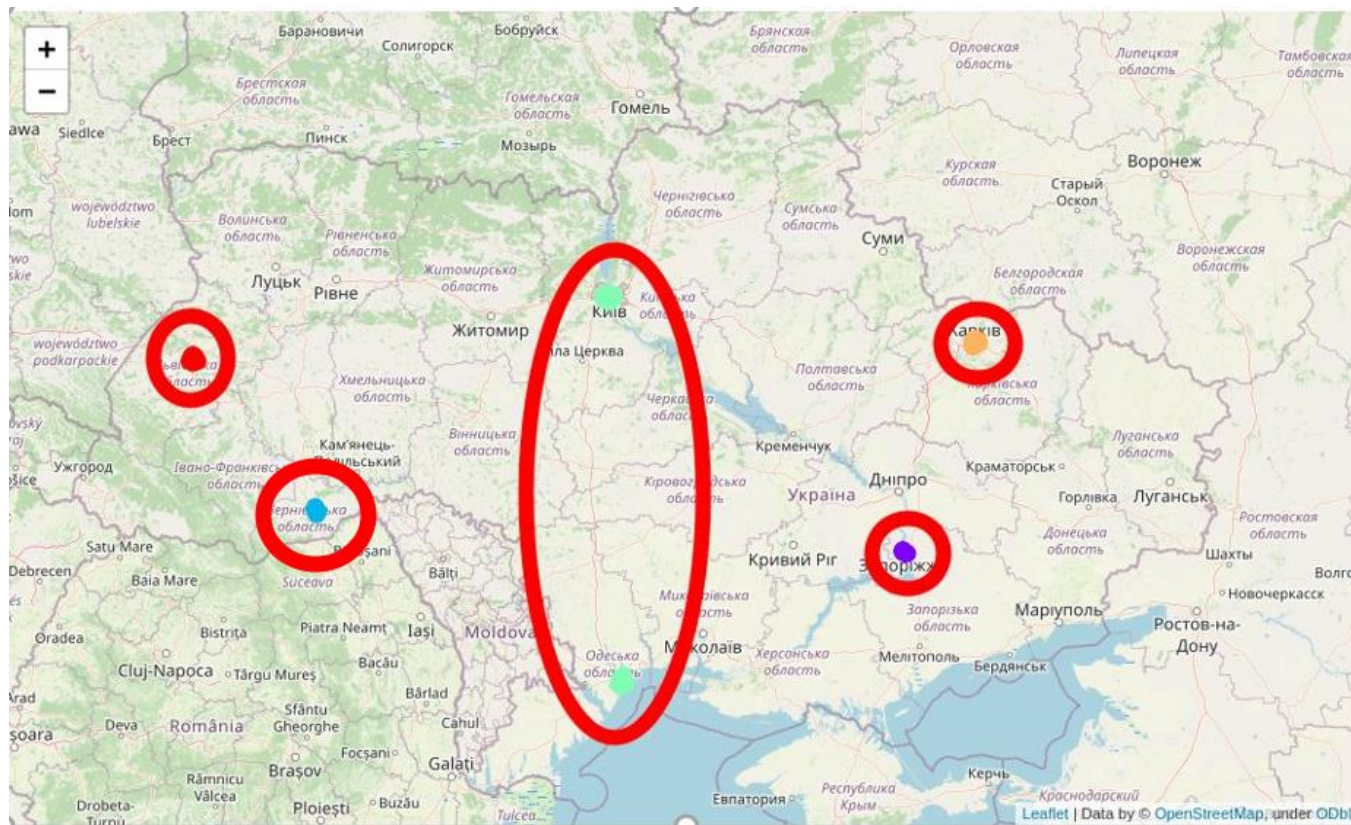
- Lviv
- Odesa
- Zaporizhia



Analysis

- Chernivtsi
- Kharkiv
- Kyiv

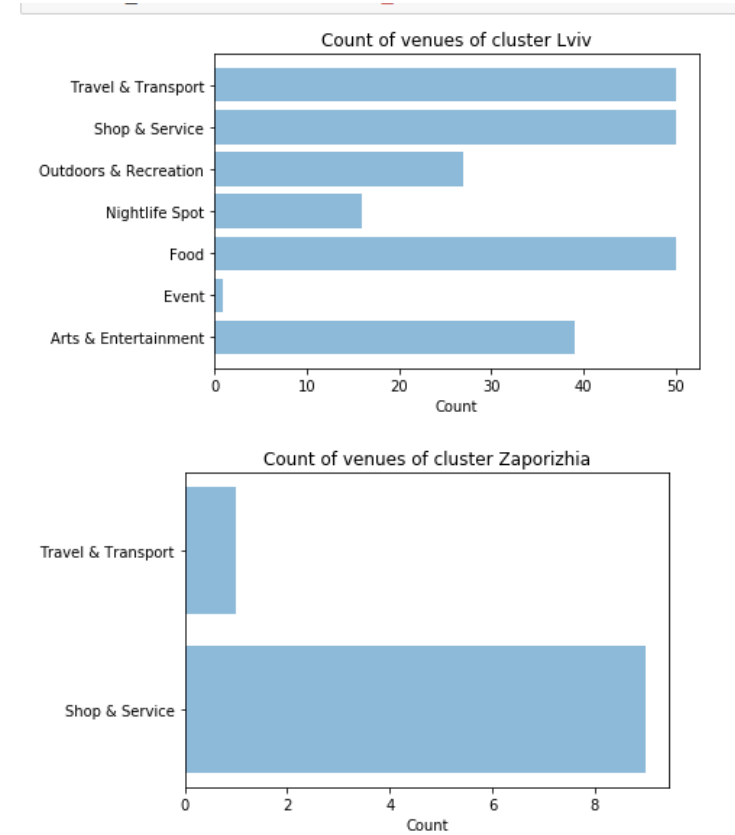
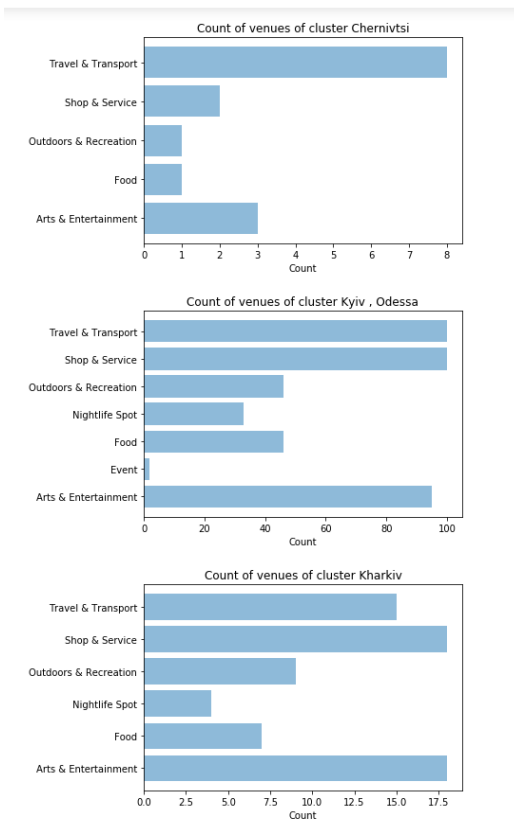




K-means Clustering

- I've separated 5 clusters.
- As we can see, most cities are unique so they form their own cluster. But Kyiv and Odesa seem to have something in common. First of all, I'm going to see each cluster and then I will move to top cities analysis.

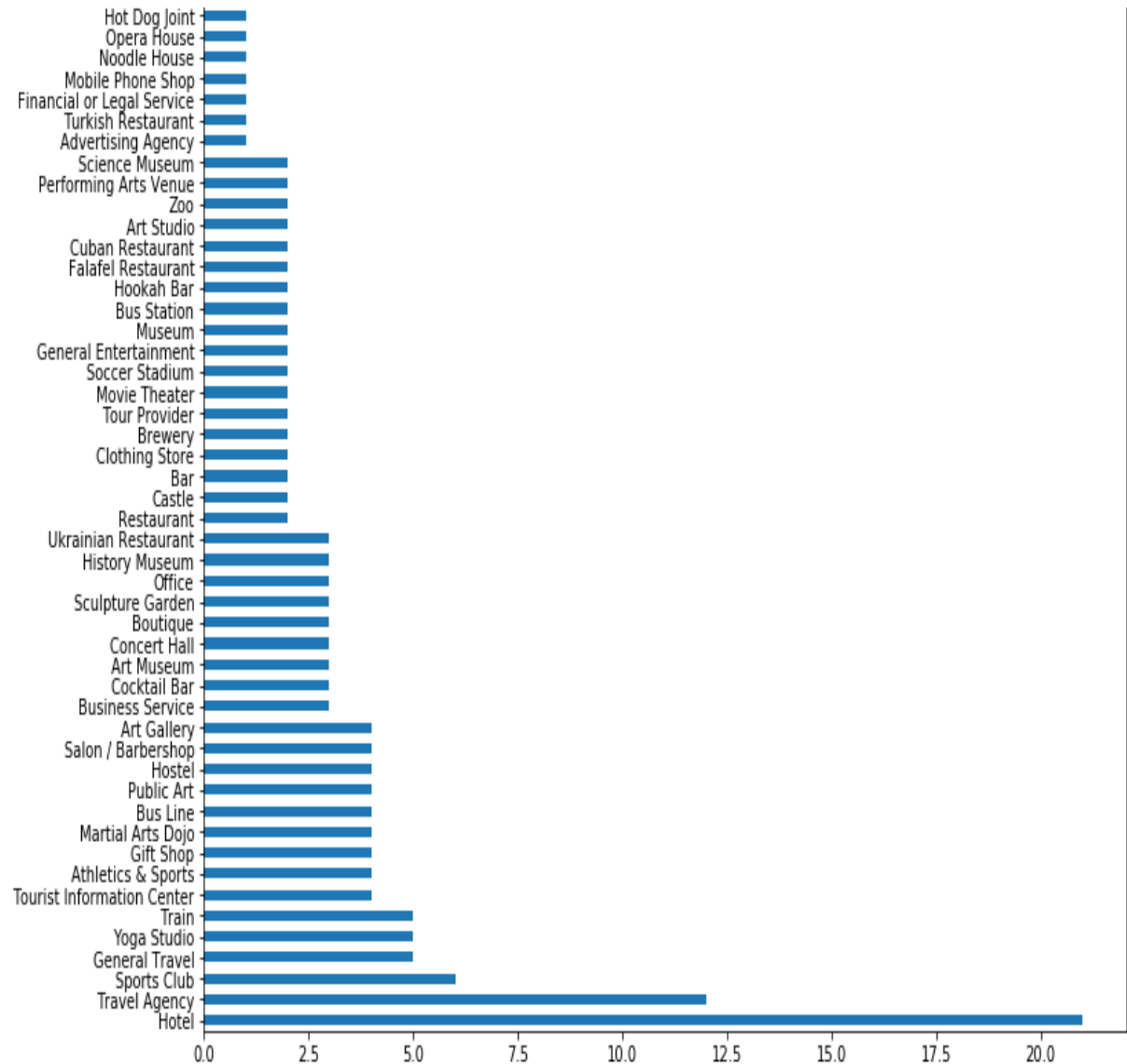
K-means Clustering



- Kyiv, Odesa – most popular venues there are shops and travel services
- Kharkiv – much less interesting for tourists' venues
- Zaporizhia – seems to have only a decade of useful for tourists' spots, mostly shops
- Chernivtsi – great small town with good transport system and several art objects
- Lviv – here are a lot of shops, cafes and art objects

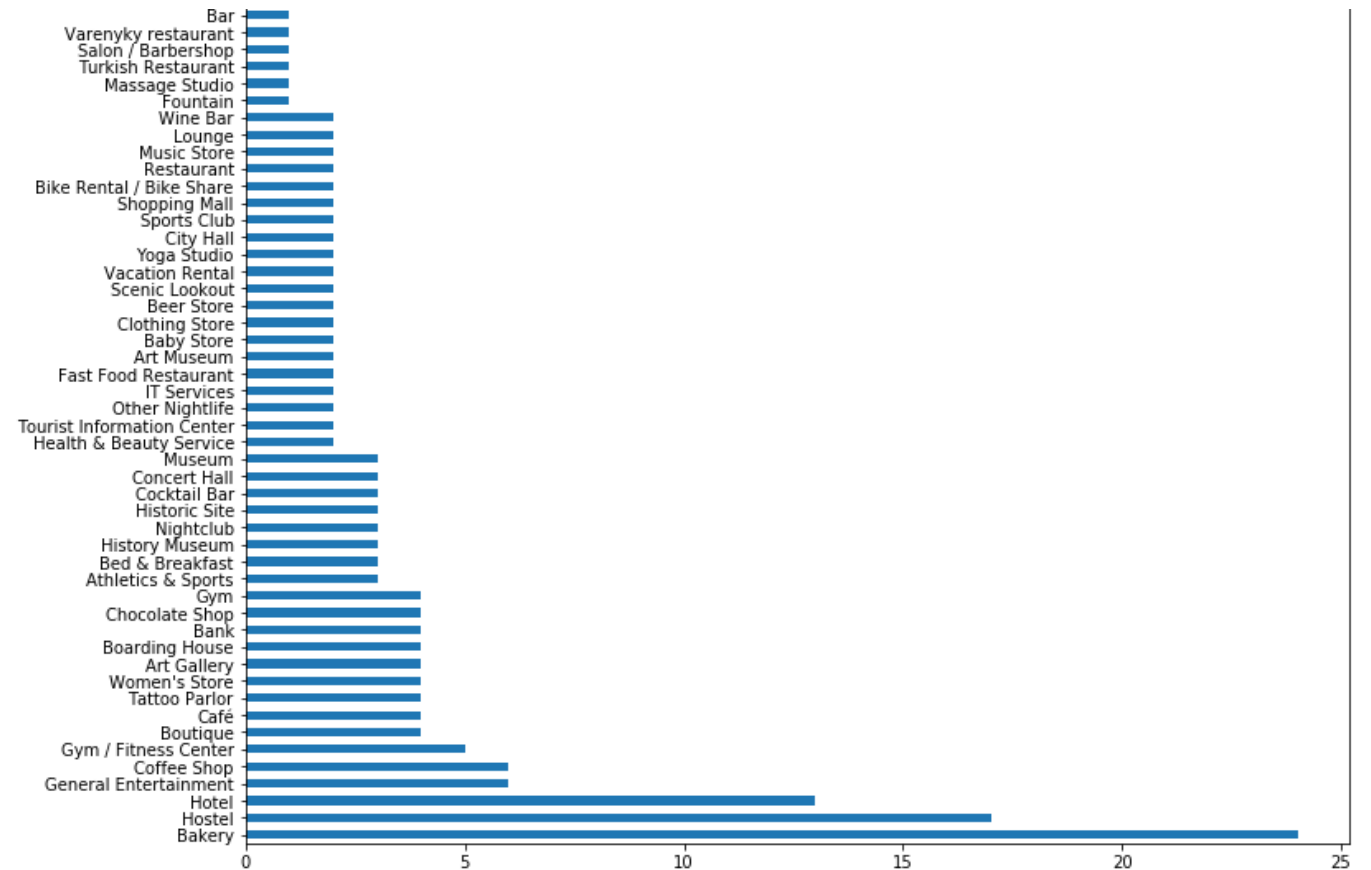
Categories overview. Kyiv

- Kyiv is the capital of Ukraine, the biggest and richest city. Thus there are a lot of hotels and travel agencies. There are also lots of shops and interesting museums and landmarks. Also, this is business city, so expect to see many business centers and luxury cars.



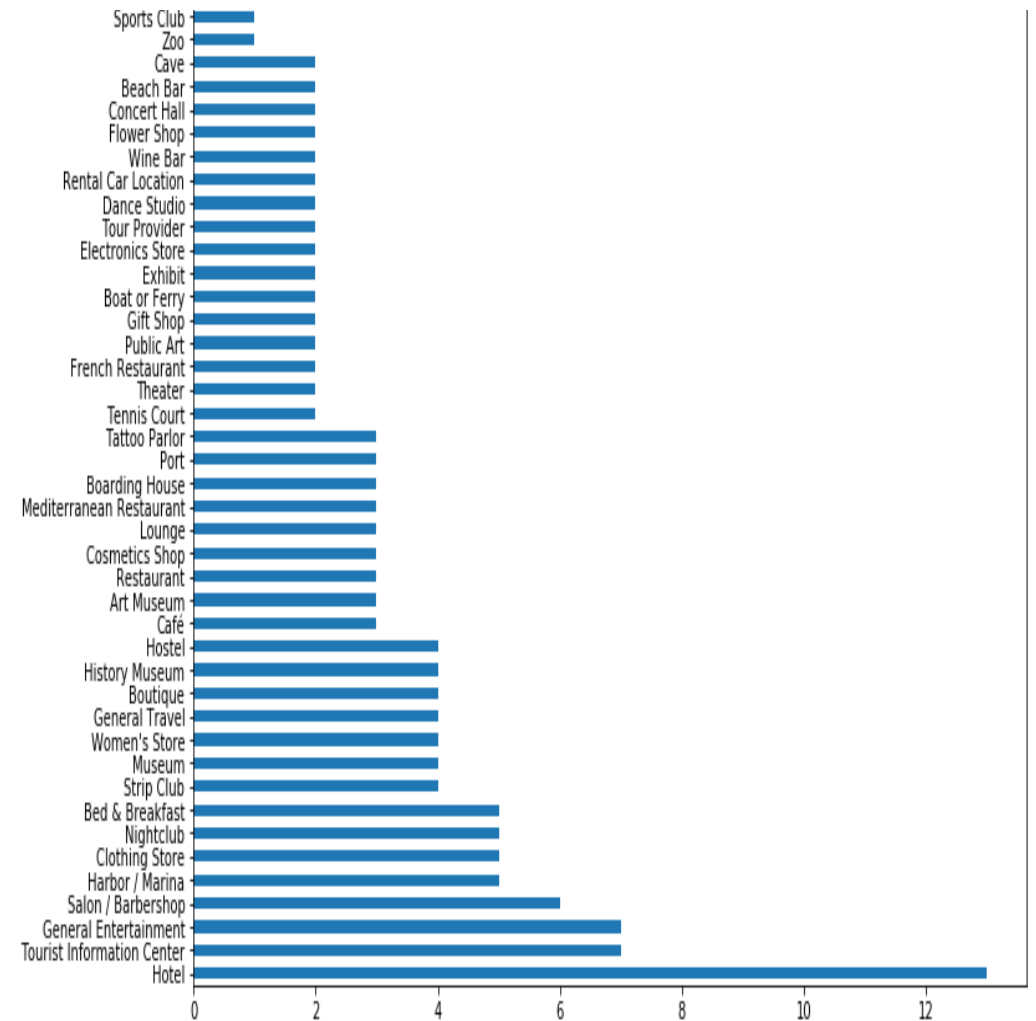
Categories overview. Lviv

- Lviv is considered to be culture capital thanks to its unique atmosphere and architecture. And also, this city is famous by its bakeries and coffee. We can see that these are not just words, but facts supported by the image we see above. Apart from bakeries and coffee shops there are a lot of places where you can stay (hotels and hostels).



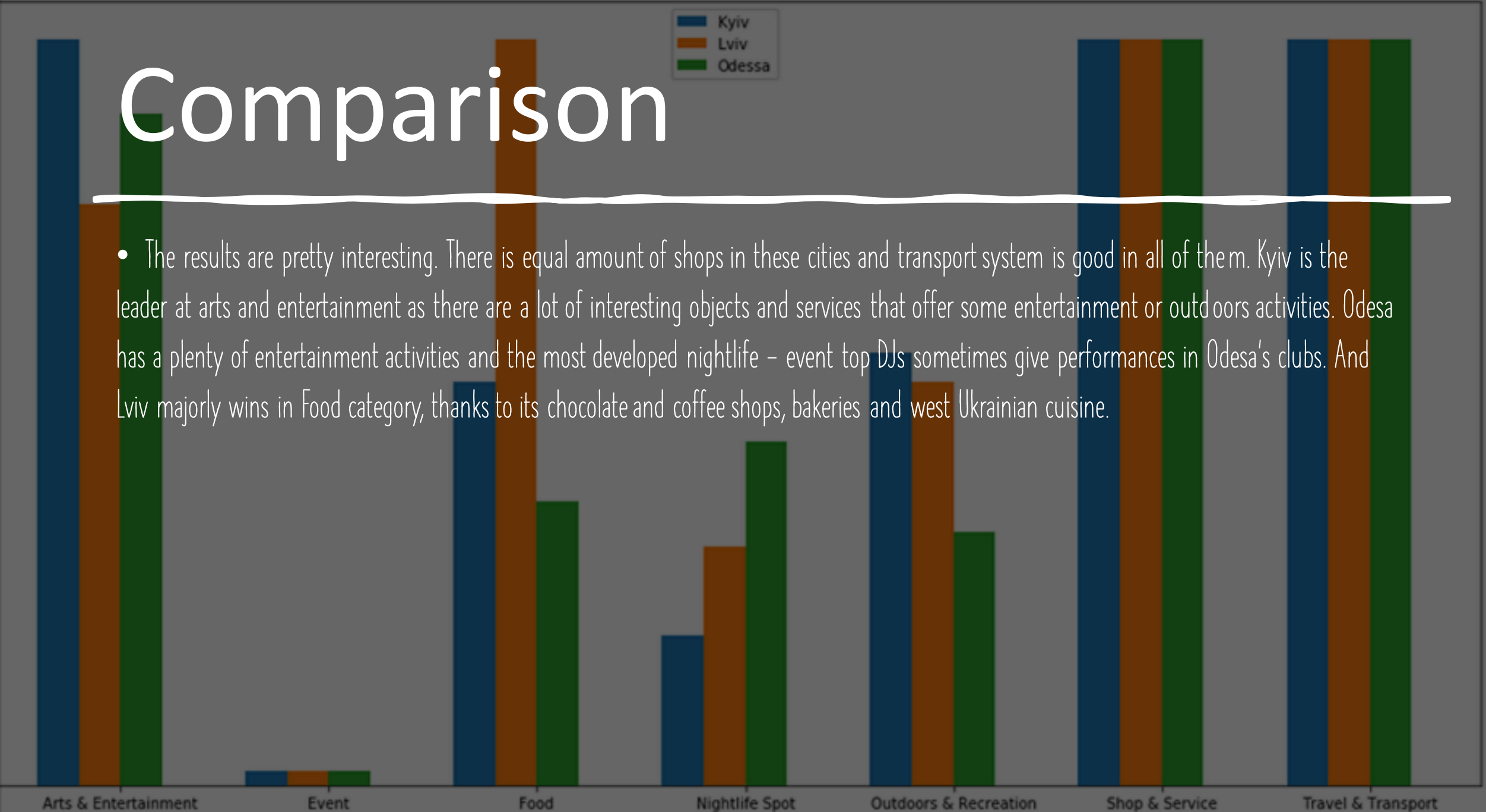
Categories overview. Odesa

- Odesa is a beautiful city near the Black Sea. It's really popular amongst tourists thus there are a lot of hotels and places to stay. As we can see, there are a lot of night clubs and activities on its charming quay. Apart from that, we can find some art museums and landmarks.



Comparison

- The results are pretty interesting. There is equal amount of shops in these cities and transport system is good in all of them. Kyiv is the leader at arts and entertainment as there are a lot of interesting objects and services that offer some entertainment or outdoors activities. Odesa has a plenty of entertainment activities and the most developed nightlife – event top DJs sometimes give performances in Odesa's clubs. And Lviv majorly wins in Food category, thanks to its chocolate and coffee shops, bakeries and west Ukrainian cuisine.



Nearby landmarks (50 km)

- two castles near Lviv
- one castle and one national park near Kyiv
- one cave and one national park near Odesa

name	categories	formattedAddress	main_category
Київська Фортеця / The Kyiv Fortress (Київська...	Castle	[вул. Госпітальна, 16, Київ, Україна]	Castle
Київщина / Kyiv Region	National Park	[Ukraine, Kyivs'ka Oblast, Україна]	National Park
Львівська Цитадель / Lviv Citadel (Львівська Ц...	Historic Site	[Грабовського, Львів, Україна]	Castle
Lviv High Castle	Castle	[Україна]	Castle
Odessa Catacombs	Cave	[Україна]	Cave
Odessa IBB Park	National Park	[Україна]	National Park

Results and Discussion

If you're looking for nice and charming atmosphere with smell of sweets, than Lviv is your bet!

If you're fan of activities and big cities – go to Kyiv and you will be satisfied!

If you're in mood for parties, sea and rest – visit Odesa and get there everything you desire!

Visit Ukraine and you'll get unforgettable emotions and impression!

Thanks for reading!

