APPLIED DATA SCIENCE CAPSTONE PROJECT

WHERE DOES CINEPOLIS SHOULD OPEN ITS NEXT THEATRE IN BOGOTA COLOMBIA?

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CINEPOLIS VIP IN BOGOTA

Cinépolis is the biggest cineplex chain in Mexico with 427 theaters in 97 cities. It is also the largest chain in Latina America_and the fourth largest in the world, with over 624 theaters.

INTRODUCTION

Cinepolis in its ambition to move as fast as possible throughout Latina America is constantly looking for the best spots and high pedestrian traffic zones to solidify its brand.

As we know, people is moved by emotions and experiences to spend its time and money. Different initiatives proposed by cinema chains have been put in practice to retain customers who visit their theaters, however this old time industry has been in decadence due to a much more affordable and on-demand options have succeed in the past years.



Cinepolis against the tide, has been able not only to survive but to grow significantly mainly due to its reinvention focused in experiences, as the new VIP theaters that offers not only the best audio/video experience but also a sofa-type spot where you can watch your favorite fil while drinking a beer and enjoying a burrito without the need to make a line in the traditional way.

While competitors try to replicate Cinepolis success, this company is trying to move fast in every big city in Latina America and the world.

We would like to help Cinepolis to define its next theater in Bogota.



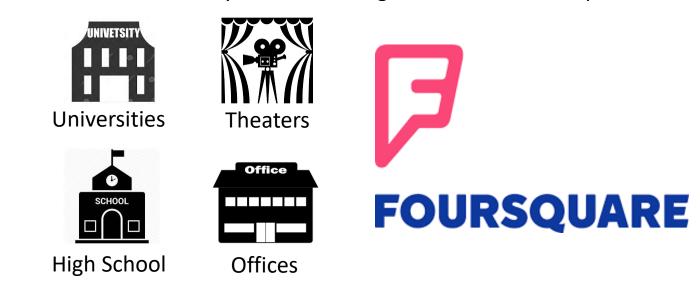


DATA

In order to decipher the best spot for Cinepolis to opens it's next theatre we will need the following data.



- Localities of Bogota, Colombia from Wikipedia.
- Latitude and longitude of these localities from Open street Map API
- We will need to analyze the following entities from Foursquare



This will provide us the necessary information to determine what should be the best option for Cinepolis to open its next venue.

METHODOLOGY

To define the best place to open a new theater we will analyze all entities that we defined as key. Universities, Offices and High Schools represent a high-traffic zone with potential customers. Knowing that convenience and having a nice place to go to watch a movie without the need to spend hours stuck in traffic is important. With the help of Foursquare we will see where all this entities are located and have a holistic view.

Each entity will be rated as follows:

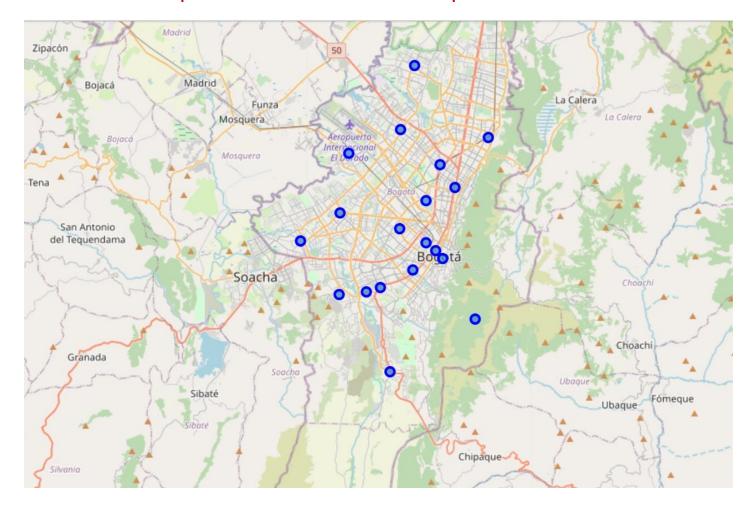
- 1. Competition theater: -1 as we would like to prevent to be next to other competitor.
- 2. Offices: +2 as we consider people from work is the best target
- 3. Universities: +1.5 as the second target group per relevance
- 4. High Schools: +1 as this group is complementary and key for promotions (mid-week)

Once we calculate together our localities in Bogota and cross the information with the potential customers (entities) and each rate according to its relevance. We are going to be able to determine the best potential spots for the new opening.

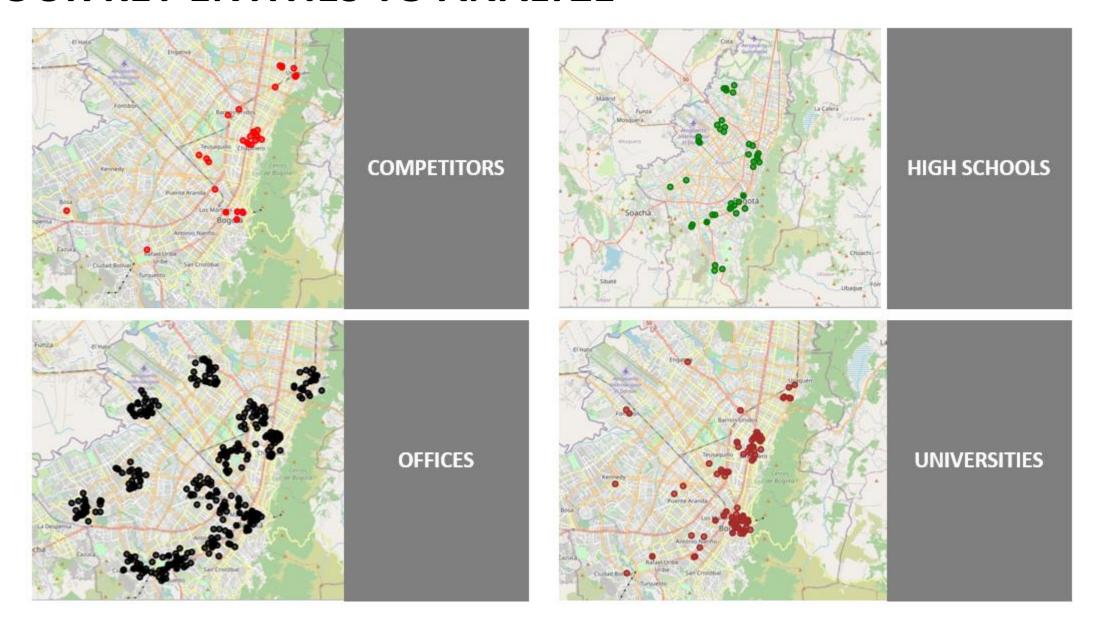
LET'S MEET BOGOTA AND IT'S NEIBORHOODS

	Localidades	Latitude	Longitude
0	Usaquén	4.690749	-74.037831
1	Chapinero	4.651976	-74.063904
2	Santa Fe (Bogotá)	4.602204	-74.078837
3	San Cristóbal (Bogotá)	4.549094	-74.047819
4	Usme	4.508155	-74.114328
5	Tunjuelito	4.570234	-74.132924
6	Bosa (Bogotá)	4.609913	-74.184710
7	Kennedy (Bogotá)	4.631732	-74.153894
8	Fontibón	4.678737	-74.146988
9	Engativá	4.696615	-74.106114
10	Suba	4.746565	-74.095228
11	Barrios Unidos (Bogotá)	4.669679	-74.075483
12	Teusaquillo	4.641244	-74.086336
13	Los Mártires	4.608375	-74.086538
14	Antonio Nariño (Bogotá)	4.587446	-74.096839
15	Puente Aranda	4.619565	-74.106607
16	La Candelaria	4.596515	-74.073492
17	Rafael Uribe Uribe (Bogotá)	4.573354	-74.122064

We can see 18 possible initial areas as an option



OUR KEY ENTITIES TO ANALYZE



RESULTS

Once we have calculated the different entities as apply a rate according to its relevance, we can see that <u>"Chapinero"</u> Seems to be the best spot as Offices and universities are concentrated near by and even though some competition is already there the demand exists.

	Localidad	Latitude	Longitude	Cinema	High Schools	Universities	Offices	
0	Usaquén	4.690749	-74.037831	8.0	0.0	6.0	27.0	
1	Chapinero	4.651976	-74.063904	13.0	6.0	29.0	28.0	
2	Santa Fe (Bogotá)	4.602204	-74.078837	3.0	2.0	22.0	27.0	
3	San Cristóbal (Bogotá)	4.549094	-74.047819	0.0	0.0	0.0	0.0	
4	Usme	4.508155	-74.114328	0.0	3.0	0.0	26.0	
5	Tunjuelito	4.570234	-74.132924	1.0	2.0	1.0	28.0	
6	Bosa (Bogotá)	4.609913	-74.184710	1.0	1.0	0.0	26.0	
7	Kennedy (Bogotá)	4.631732	-74.153894	0.0	1.0	1.0	26.0	
8	Fontibón	4.678737	-74.146988	0.0	3.0	2.0	28.0	
9	Engativá	4.696615	-74.106114	0.0	5.0	1.0	28.0	
10	Suba	4.746565	-74.095228	1.0	5.0	1.0	28.0	
11	Barrios Unidos (Bogotá)	4.669679	-74.075483	2.0	3.0	1.0	27.0	
12	Teusaquillo	4.641244	-74.086336	3.0	0.0	8.0	29.0	
13	Los Mártires	4.608375	-74.086538	2.0	1.0	3.0	22.0	
14	Antonio Nariño (Bogotá)	4.587446	-74.096839	0.0	5.0	5.0	25.0	
15	Puente Aranda	4.619565	-74.106607	0.0	0.0	2.0	24.0	
16	La Candelaria	4.596515	-74.073492	5.0	2.0	30.0	25.0	
17	Rafael Uribe Uribe (Bogotá)	4.573354	-74.122064	0.0	4.0	1.0	27.0	

[56]:		Localidad	Score
	1	Chapinero	92.5
	16	La Candelaria	92.0
	2	Santa Fe (Bogotá)	86.0
	12	Teusaquillo	67.0
	14	Antonio Nariño (Bogotá)	62.5
	9	Engativá	62.5
	8	Fontibón	62.0
	10	Suba	61.5
	17	Rafael Uribe Uribe (Bogotá)	59.5
	5	Tunjuelito	58.5
	11	Barrios Unidos (Bogotá)	56.5
	0	Usaquén	55.0
	4	Usme	55.0
	7	Kennedy (Bogotá)	54.5
	6	Bosa (Bogotá)	52.0
	15	Puente Aranda	51.0
	13	Los Mártires	47.5
	18	Ciudad Bolívar (Bogotá)	47.5



FINAL RECOMMENDATIONS

According to our inputs "Chapinero" has given the highest rate in our analysis however adding more variables would strengthen the decision, some other alternatives such as malls, exposition centers or even existing cinema complex from competitors that could be bought and renewed.

Go deeper within the neiborhoods and explore zip codes or important avenues to consider this high traffic city veins.

As Cinepolis VIP is a high-end value proposition, social class areas would be useful to consider and make sure that the right spot belongs to a mid/high target.