Valencia data by districts to begin a business

By Luis Enrique Palma
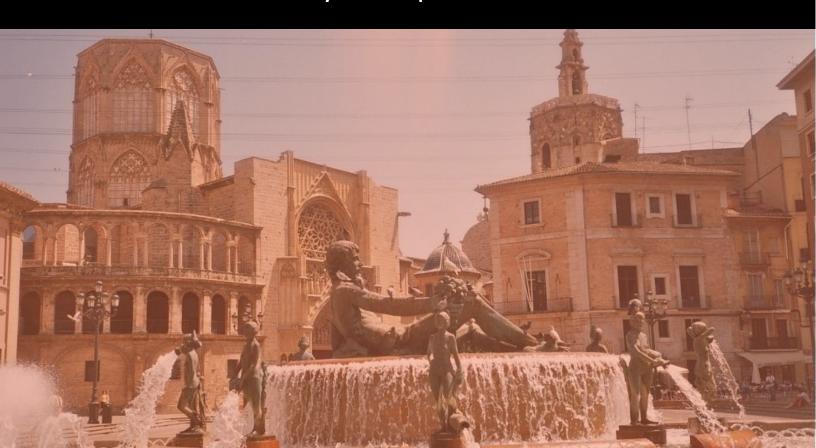
Table of Contents
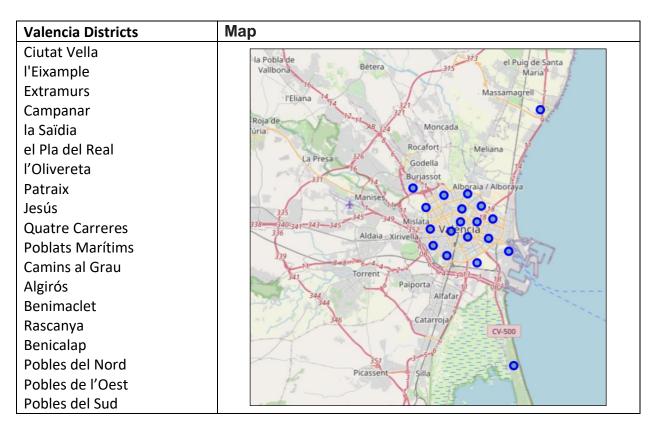
1. Introductory Section

Valencia is the third largest city in Spain, it is the capital of the province of Valencia which is located in the Valencian Community, this report will show relevant demographic data, analysis of interest and an ideal tool that will serve as support for those interested in starting a business in the city.

Valencia is located in the east of Spain, facing the Mediterranean Sea, it is crossed by the Turia river, the greatest contribution to its economy is by tourism and services, on a smaller scale there are industrial, construction and agriculture. Valencia capital is made up of 19 districts, which will be presented in this report according to the average characteristics of its habitants to have an adequate idea of what type of business will be more worth starting in each of the districts.

Table 1. Valencian Districts

Valencia Districts	Map
Ciutat Vella l'Eixample Extramurs Campanar la Saïdia el Pla del Real l'Olivereta Patraix Jesús Quatre Carreres Poblats Marítims Camins al Grau Algirós Benimaclet Rascanya Benicalap Pobles del Nord Pobles de l'Oest Pobles del Sud	

Source: self made

2. Metodology Section

The methodology is divided into two stages, the first consists of collecting relevant and current quantitative information with which to achieve greater precision in the estimates suggested or made with the help of the results. The second stage consists of data processing with the use of MS Excel, MS Word and Python with its different libraries to achieve the results.

2.1. Firts Stage: Data Minning

Demographic and descriptive information was collected of the year 2020 of the inhabitants of Valencia by their districts through the official page of the Valencia City Council, Gross average income of 2019, from the official page of the Institute of Statistics of Spain, coordinates of their districts in Google Maps, information of current most popular businesses on Foursquare and other qualitative information on Wikipedia (not being scientific).

The Data Frame (DF) was built in MS Excel from the tables collected in the sources mentioned in the previous paragraph and the following table resulted:

Table 2. Initial DataFrame

District	Area (he)	Pop/km2	Population	Men population	Women population	Age 0-19	Age 20-39	Age 40-59	Age 60 greater	Foreigns	Foreigns EU	Foreigns Rest Europe	Foreigns Africa	Foreigns North Central America	Foreign South America	Foreign Asia	Foreign Other	Unemployed	Tourism	Bus	Truck	Tractor	Trailer	Motorcycle	Moped	Average Gross income 2018
Ciutat Vella	169	16,225	27,418	13,034	14,384	4,362	7,116	8,582	7,358	4,784	2,316	292	452	518	771	427	8	1,640	14,073	526	1,883	484	274	3,504	745	25064
l'Eixample	173.3	24,709	42,826	19,769	23,057	7,822	9,379	13,135	12,490	4,675	2,178	244	303	589	926	422	13	2,333	19,745	2	1,171	447	387	4,375	1,011	26142
Extramurs	197.2	24,789	48,877	22,440	26,437	8,380	11,258	14,659	14,580	5,705	2,018	274	341	654	1,557	853	8	3,140	21,073	73	1,124	311	305	4,191	970	20247
Campanar	523.8	7,395	38,736	18,370	20,366	7,868	8,620	11,775	10,473	5,178	1,666	523	507	430	1,309	740	3	2,485	17,422	90	725	213	158	2,866	716	17988
la Saïdia	194.4	24,431	47,491	21,996	25,495	7,815	11,570	14,131	13,975	7,222	2,027	689	760	631	2,216	894	5	3,793	19,351	5	1,207	223	271	3,190	1,177	14429
el Pla del Real	169.3	18,101	30,644	14,098	16,546	5,979	7,350	8,208	9,107	2,898	1,183	127	154	248	729	449	8	1,433	15,167	9	716	249	202	3,282	765	26930
l'Olivereta	198.9	24,764	49,250	23,386	25,864	8,342	11,783	15,357	13,768	8,935	1,725	634	1,038	772	2,738	2,024	4	4,485	19,989	31	1,203	176	204	2,830	1,144	12427
Patraix	287.3	20,209	58,053	27,461	30,592	10,235	13,030	18,523	16,265	5,857	1,378	430	588	472	1,815	1,170	4	4,354	27,448	11	1,624	605	334	4,272	1,282	14907
Jesús	298.5	17,730	52,917	25,679	27,238	8,946	12,686	16,697	14,588	7,990	1,554	423	1,119	705	2,586	1,600	3	4,516	22,696	23	1,403	245	243	3,689	1,461	13065
Quatre Carreres	1,132.50	6,580	74,518	35,749	38,769	13,683	17,255	23,742	19,838	10,707	2,989	702	930	1,043	3,143	1,878	22	6,741	32,231	9	2,036	819	1,049	5,317	2,286	13704
Poblats Marítims	396.7	14,049	55,725	26,841	28,884	10,073	13,093	17,479	15,080	7,917	3,105	598	902	534	1,801	969	8	6,194	23,796	26	1,568	985	1,291	3,991	2,058	13064
Camins al Grau	236.7	27,834	65,890	31,667	34,223	13,084	15,274	21,546	15,986	10,070	2,954	766	870	585	2,534	2,351	10	5151	26504	38	1614	539	565	4790	1563	15962
Algirós	295.9	12,388	36,657	17,250	19,407	5,509	9,372	9,993	11,783	4,269	1,211	231	384	274	1,221	947	1	2,626	16,895	8	643	129	131	2,755	868	17502
Benimaclet	157	18,268	28,686	13,381	15,305	4,456	7,695	8,049	8,486	3,391	1,090	165	303	390	850	589	4	1,981	12,576	0	500	126	112	2,051	723	17122
Rascanya	262.9	20,631	54,233	26,412	27,821	11,105	13,138	17,374	12,616	9,500	1,722	697	1,889	837	2,868	1,484	3	5,177	21,361	2	1,220	225	187	3,311	1,507	12660
Benicalap	221.6	21,401	47,421	22,947	24,474	9,515	11,535	15,242	11,129	6,960	1,531	562	988	544	2,091	1,243	1	4,015	19,719	9	1,105	298	235	2,873	1,270	12761
Pobles del Nord	1,519.60	433	6,582	3,179	3,403	1,333	1,334	2,102	1,813	472	185	44	79	56	94	11	3	396	3,452	0	315	189	132	668	301	17773
Pobles de l'Oest	201.1	7,250	14,581	7,078	7,503	2,916	3,450	4,617	3,598	1,865	589	199	203	159	583	131	1	1374	6661	0	529	94	70	995	443	11576
Pobles del Sud	3,242.60	649	21,040	10,380	10,660	3,853	4,874	6,605	5,708	2,277	961	82	239	187	619	188	1	1,721	10,858	34	960	546	616	1,549	680	13576

Source: self made

2.2. Second Stage: Data Processing

To process the data, the previous DF will be imported in Jupyter labs and with the use of Python language and its libraries such as pandas for Dataframe manipulation ; the folium library for the creation of interactive, informative and coropletic maps; the json library for the extraction of coordinates through the Beautifulsoup library, geocoder, geopy and geopandas; the seaborn and matplotlib libraries for creating frequency and other statistical data graphs; the sklearn library for the K Nearest Neighbors implementation of the most popular sites in their districts collected by Foursquare developer account and other libraries will be included to process or complement the information.

3. Results Section

Next week

4. Discussion Section

Next week

5. Conclusions

Next week

6. References

Valencia Town Hall. (2020, December). From Ajuntament de Valencia:

https://www.valencia.es/es/cas/estadistica/mapa-barrios

Enterat. (2021). *Enterat*. From https://www.enterat.com/actualidad/habitantes-valencia.php

INE. (2020). *Instituto Nacional de Estadística*. From https://ine.es

Wikipedia. (2021). *Wikipedia.org*. From https://es.wikipedia.org/wiki/Valencia

Foursquare. (2021). *Foursquare*. From https://foursquare.com

Google. (2021). *Google maps*. From

https://www.google.com/maps/place/Valencia,+Espa%C3%B1a/