

WORLD ANALYTICS RESEARCH

infrastructure research company

ABOUT US

We are a company that does analytical research in the infrastructure field and uses data to make and give analysis, using ML models, dashboards and maps.



World Analytics

RESEARCH

WORLD ANALYTICS

RESEARCH

AGENDA

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W.A.R
presentation

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Problem
overview

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Problem
solution

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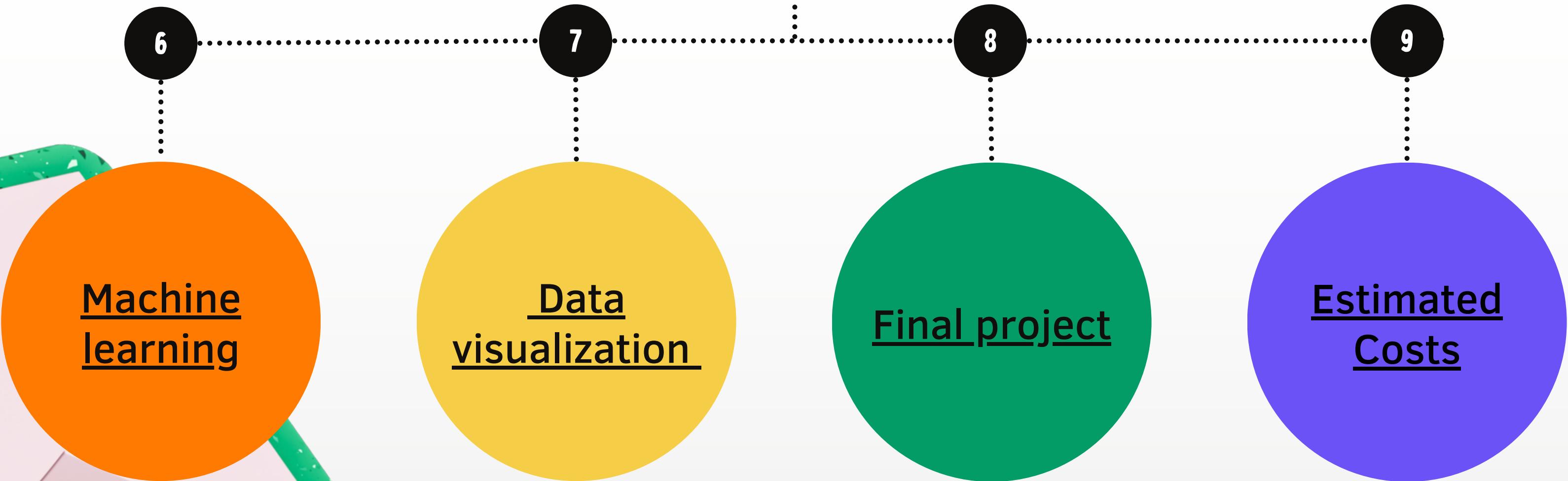
Datasets and
Ingestion

5

Manage and
Storage



AGENDA



PROBLEM OVERVIEW



Our client wants to have a piece of knowledge about Milan, Paris, and Berlin infrastructure and building costs with the goal to know the best location to build a new Europe research center.

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PROBLEM SOLUTION

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Our first goal is to have useful datasets to make analyses.



- make heat maps to present the best area in the city's and graphs to visualize the current situation in specific fields.
- use ML models to cluster our data to have the best locations
- linear regression to predict the trend of our data



DATASETS

We got datasets regarding the city's infrastructure, services, and network infrastructure.

We have stored all the datasets on google drive to be able to work autonomously having the data wherever we are.

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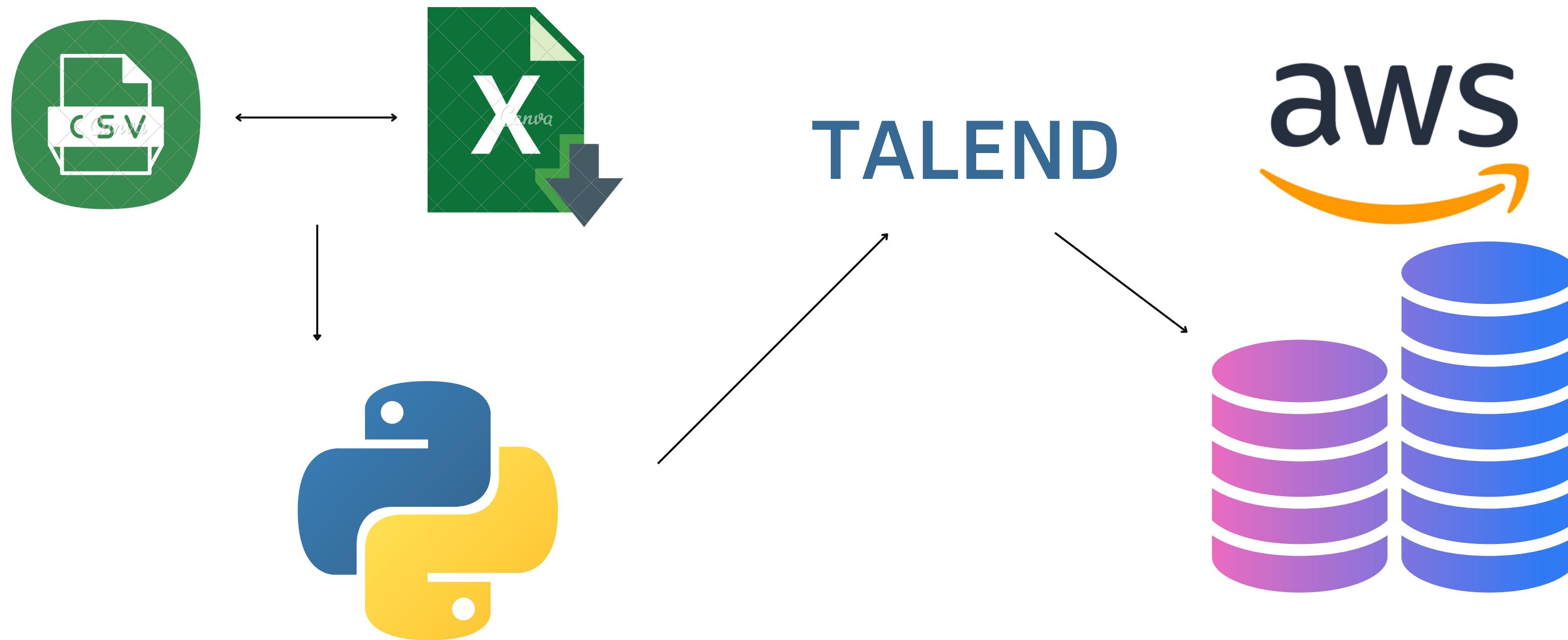


MANAGE AND STORAGE

First we clean the datasets to occupy less memory and have a better analysis.

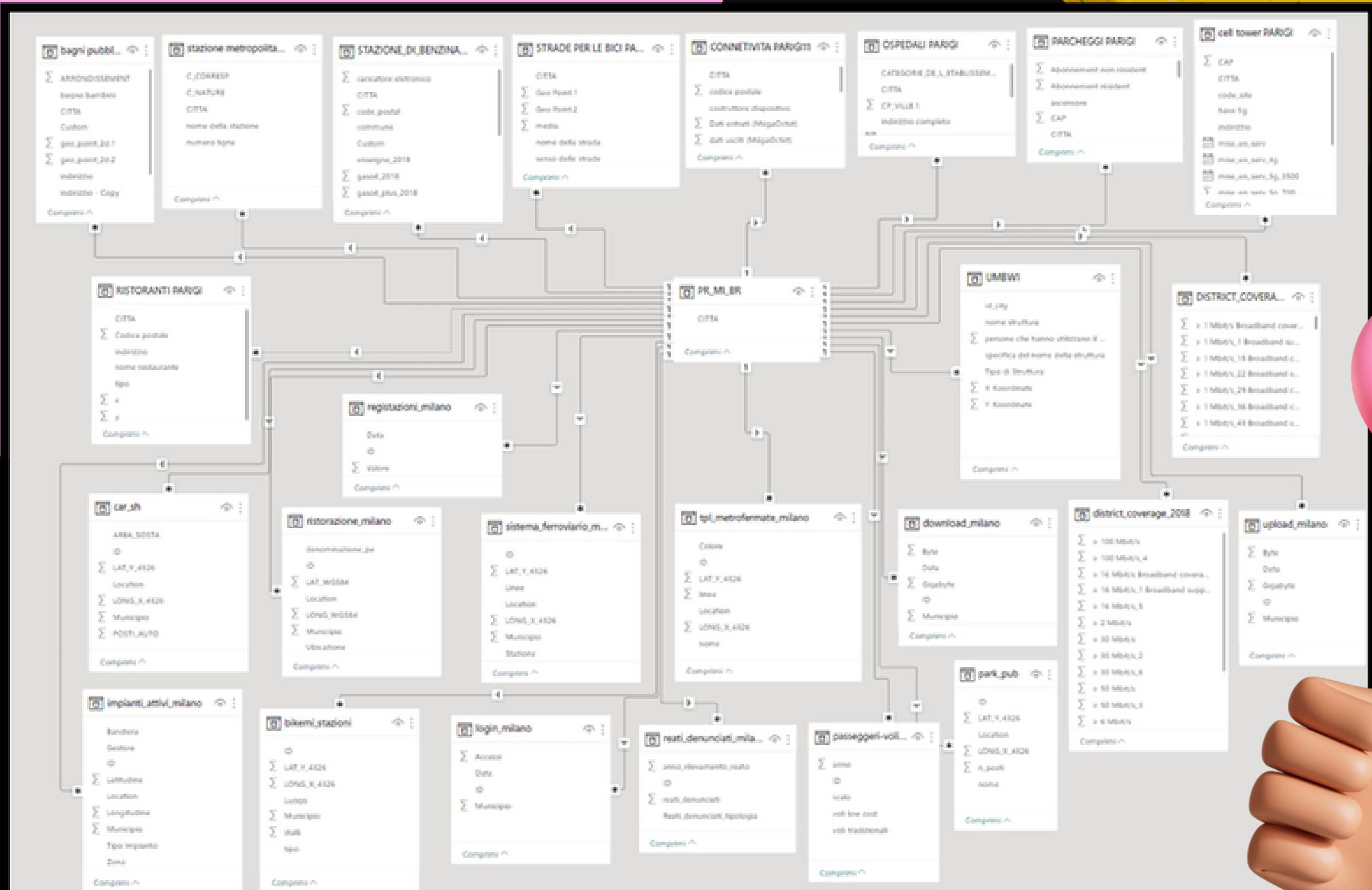
Then we will load the information into a MySQL database, hosted on AWS using Talend.

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DATA MODEL

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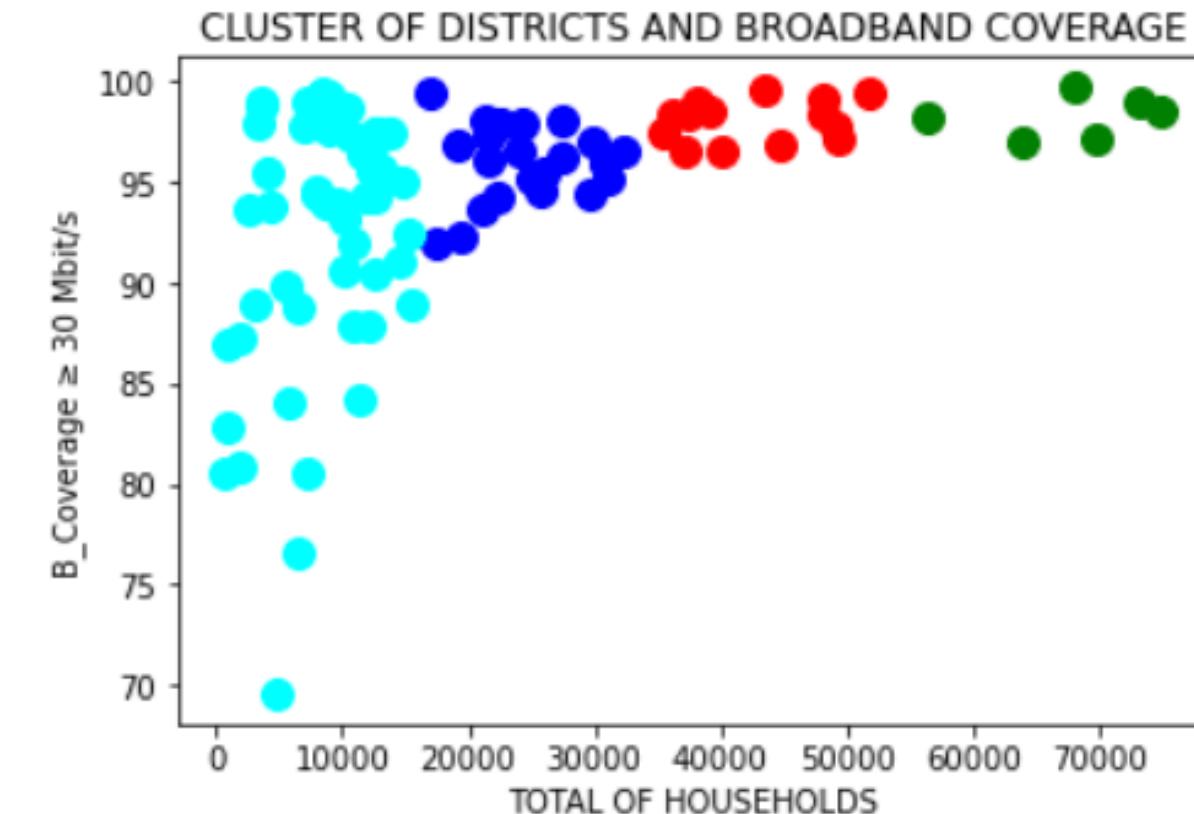




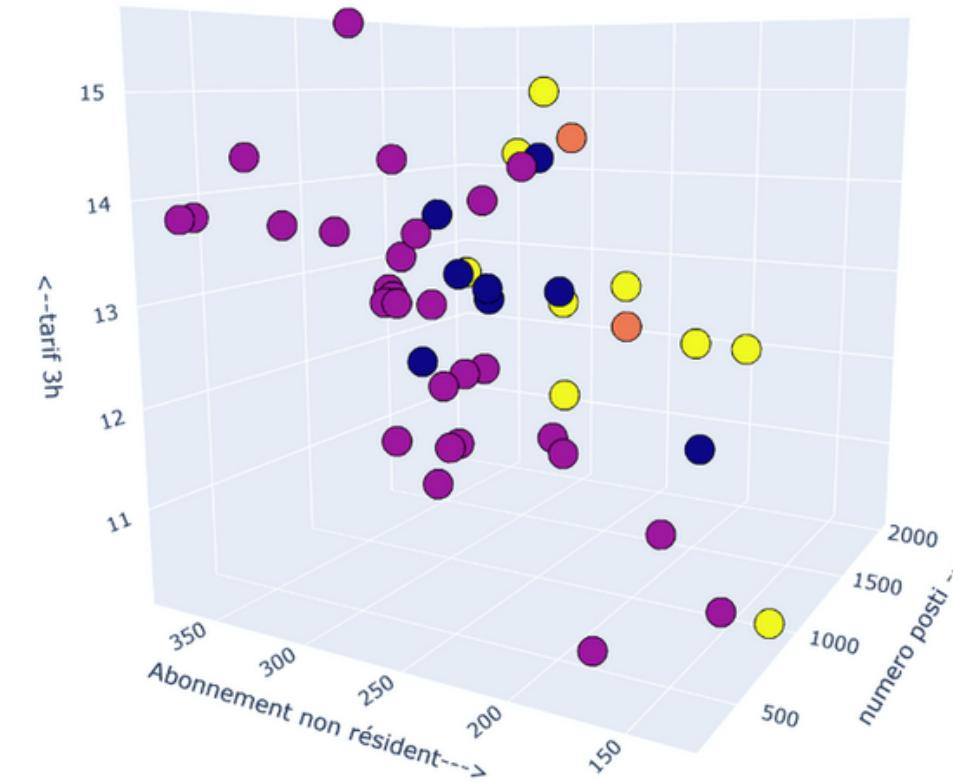
MACHINE LEARNING

we have decided to use 2 types of machine learning: Kmeans Clustering and Linear Regression

presence, in %, of broadband coverage ≥ 30 mbit/s, per number of households in Berlin



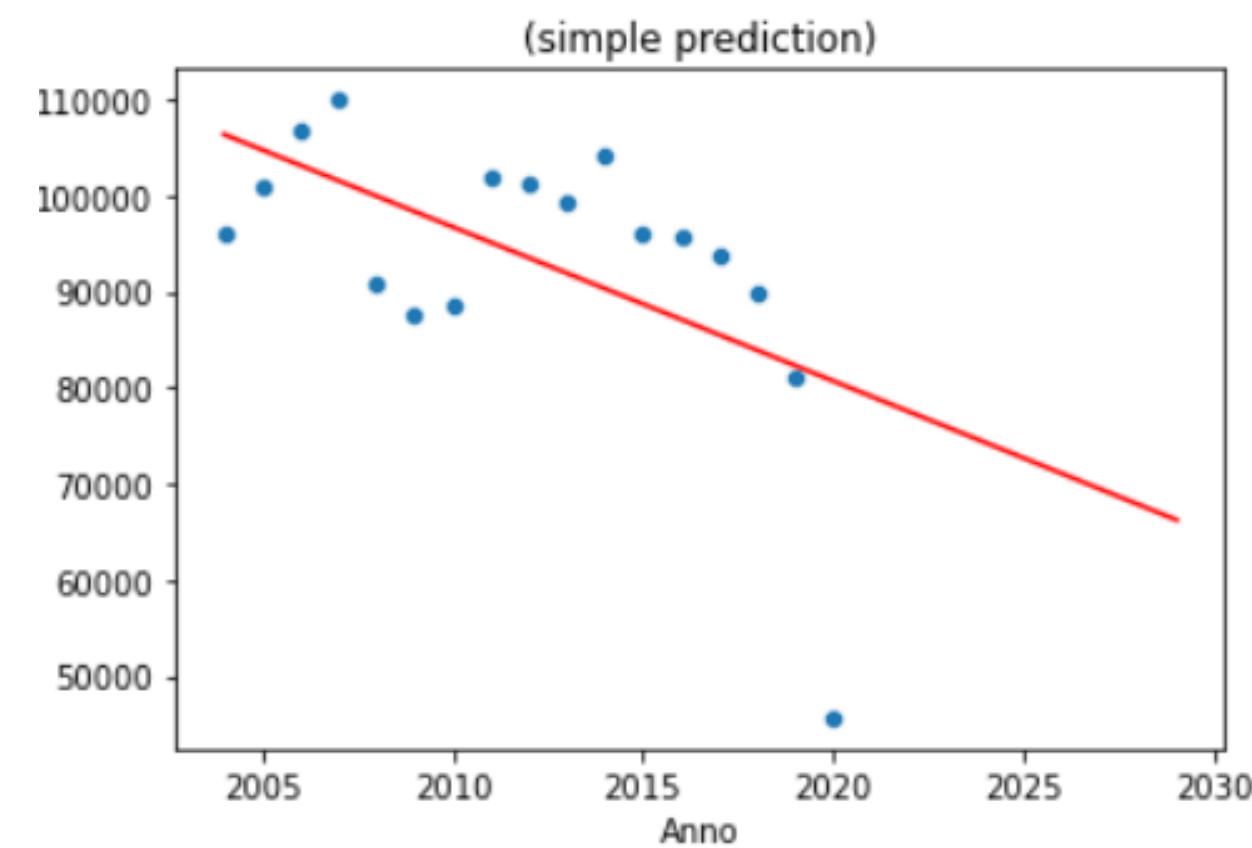
cluster on the number of parking spots in Paris, with cost per hour, based on the number of people that have a membership card but don't live in the city



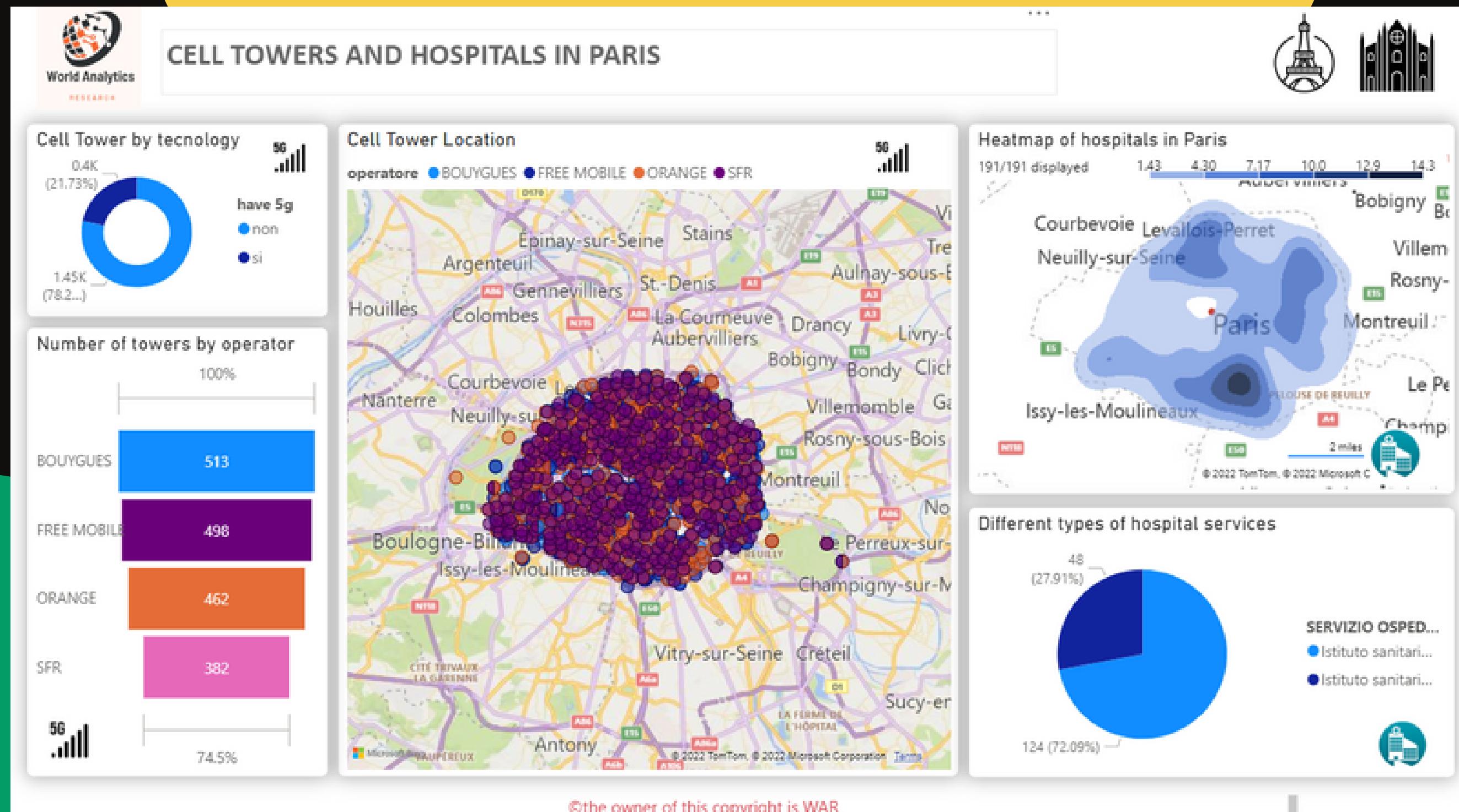
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simple prediction of thefts in Milan

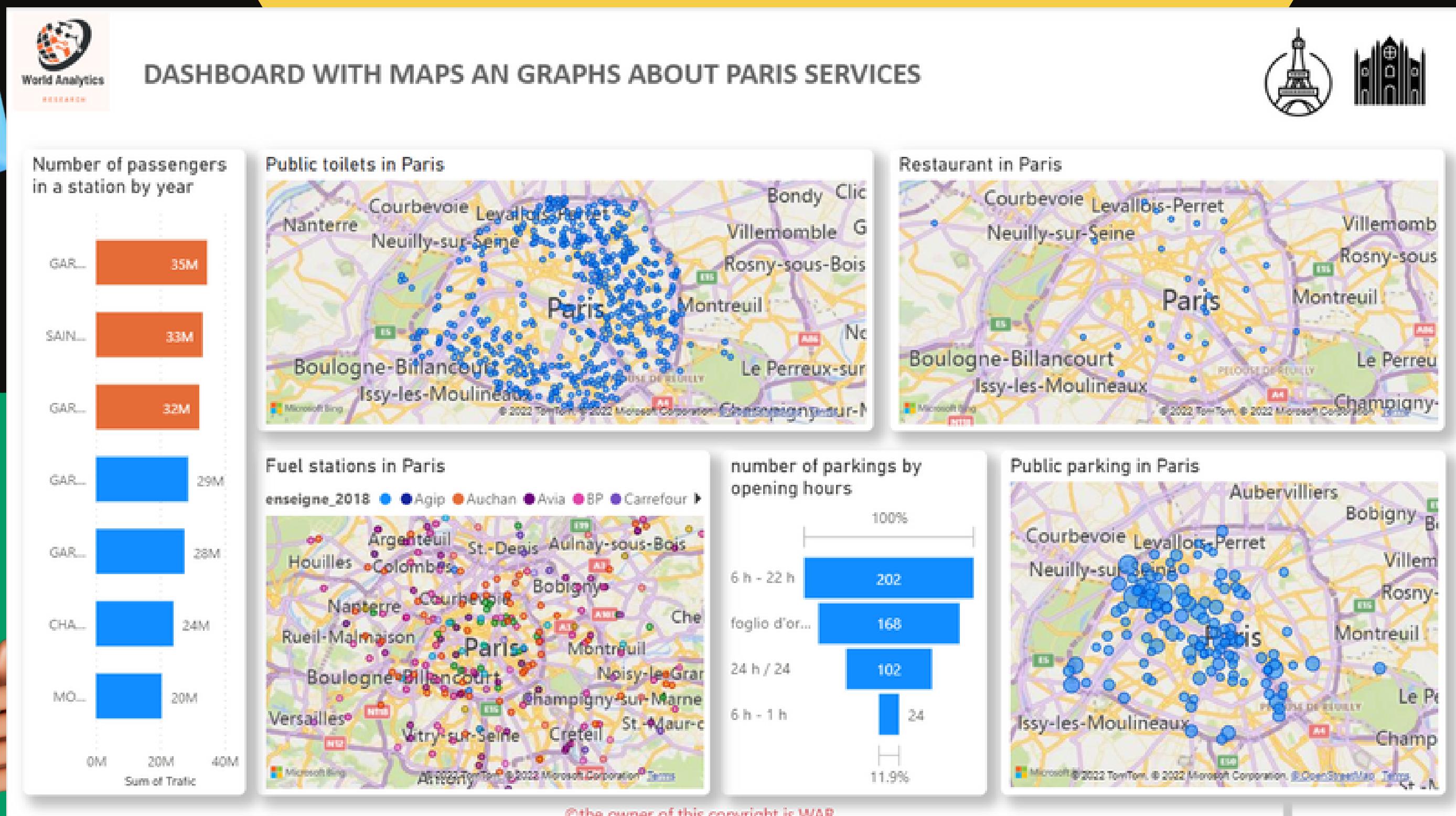


POWER BI



POWER BI

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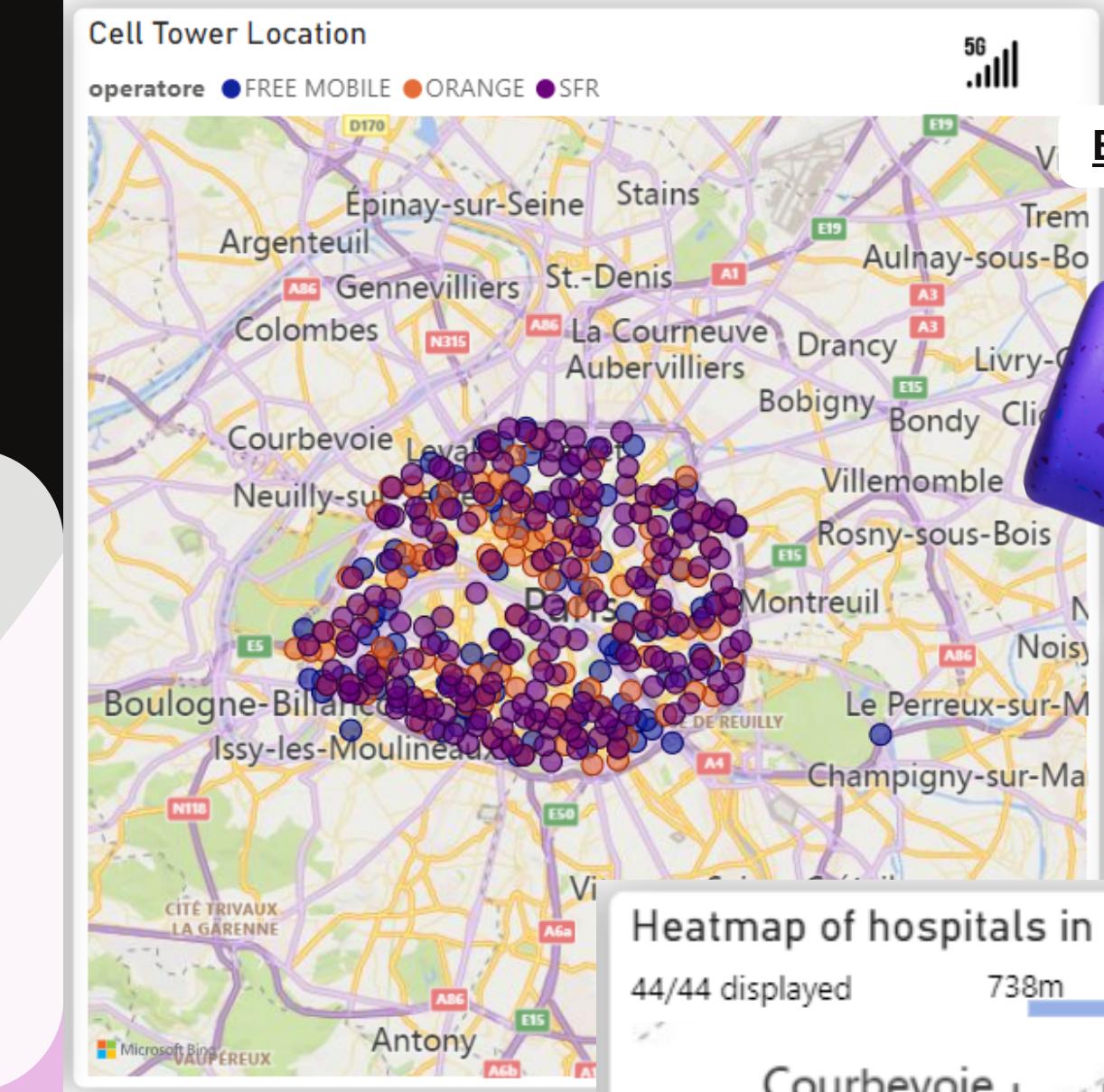
APPLIED FILTERS



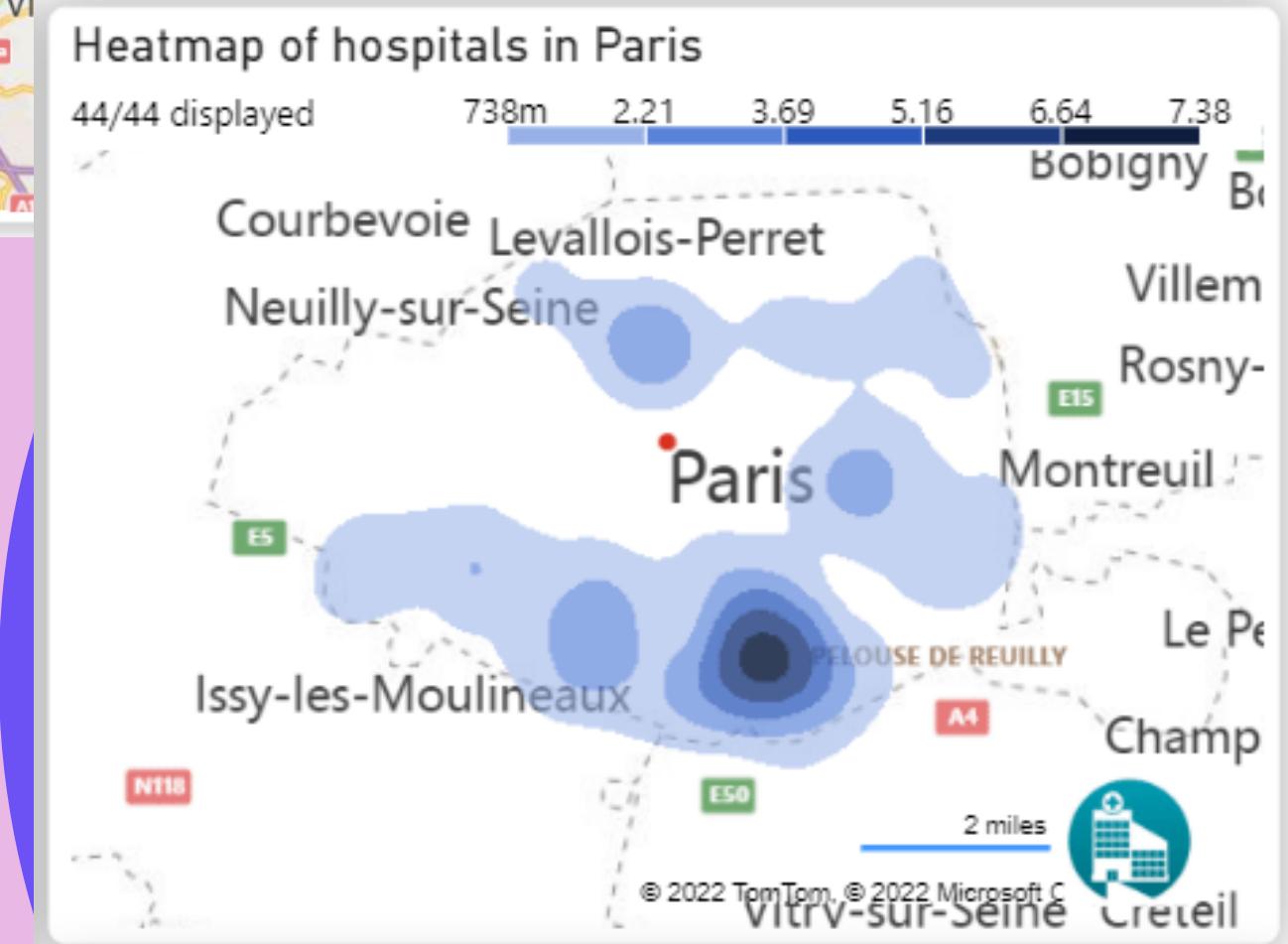
we made a filter on the towers that have the 5G technology



we suggest the southern neighborhood of Paris to build the research center



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POWER BI

WORKSITE, RESTURANT, AND PUBLIC NETWORK IN MILAN

restaurant in Milan
6211/6211 displayed

Average value of downloaded internet data by zone

Zone	Average Value
1	3bn
2	3bn
3	2bn
4	59.9%

Metro stations in milan

Worksite in Milan by type

Average value of Accesses by zone

Zone	Average Value
1	521
2	465
3	438
4	378
5	345
6	310
7	292
8	276
9	37.8%

Train stations in milan

SUGGESTED NEIGHBORHOOD



looking at the heatmap we found that there is a more restaurants in **the northeastern neighborhood of Milan** and also its is well connected to the metro network of the city



restaurant in Milan

6211/6211 displayed

16.2

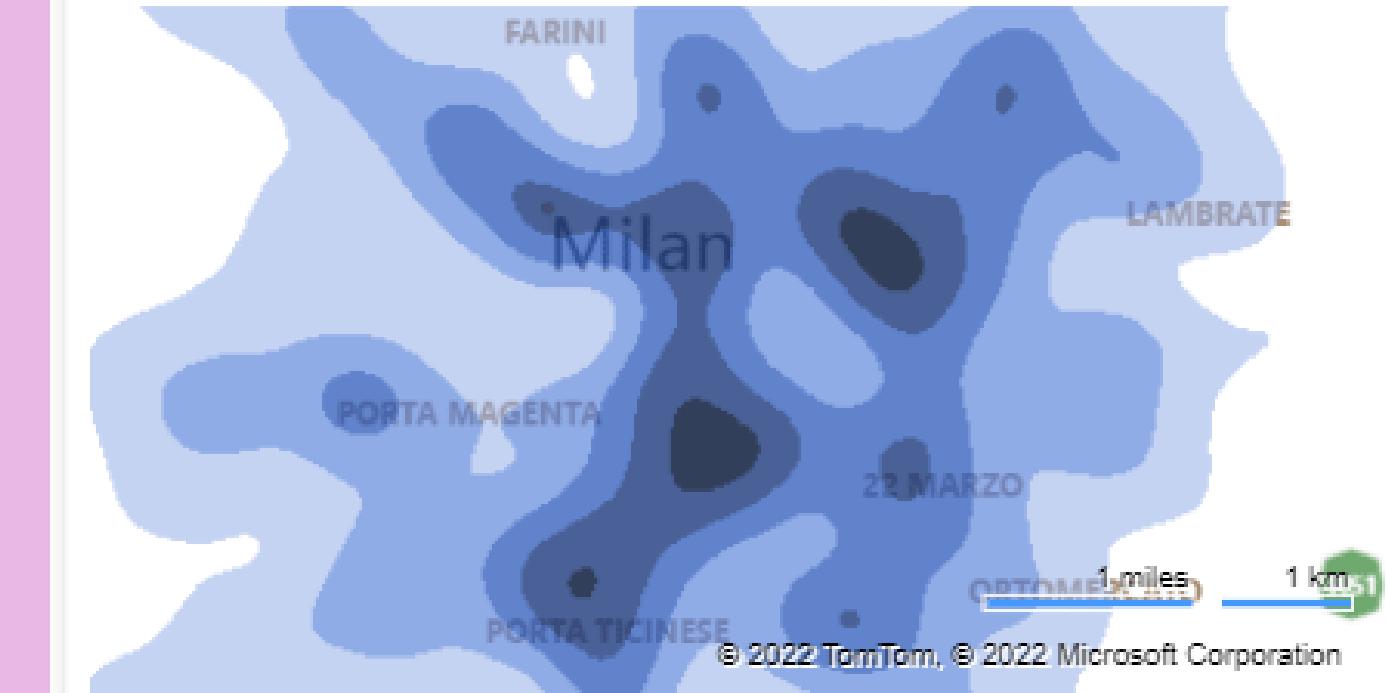
48.6

81.0

113

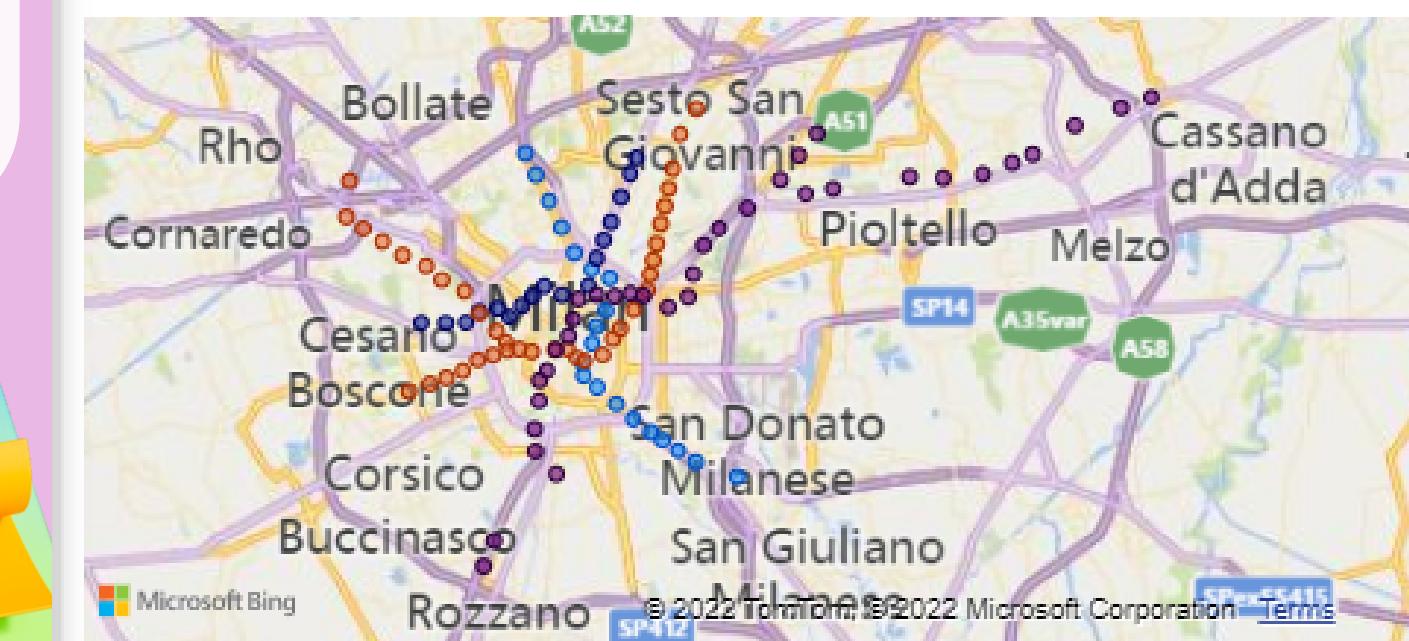
146

162



Metro stations in milan

Colore ● Gialla ● Lilla ● Rossa ● Verde



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ESTIMATED COSTS

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For the estimated offer, the offer must be accepted by Christmas and we expect a maximum time of 6 months for the realization of the project.

The payment is divided by parts of the project and also optional part (options*).

Progettazione	15000€
Implementazione	8621,4€
AWS	250€/mese
Talend	1170€/mese
PowerBI premium	16,90€/mese
Accesso Drive (Dataset)*	10000€*
Totale	23621,4€ 33621,4€*

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