Hack a City

PORTO

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Introduction

How can tourism be quantified in a business meaningful way?

What data is available for solving this problem?

What geographical granularity would provide the most value?

Background - Literature Review

- Several factors account for considering successful tourism: Transport offer,

- Analysis of Critical Success Factors for Entertainment Tourism Destinations: The Supply Perspective

Background - Data

What are we looking for?

Most precise geographical location possible.

Successful tourism factors.

Problem Definition

How can we quantify how interesting are particular areas of the city?

Supply

Cultural offers
Leisure opportunities
Accessibility capabilities

Demand

Network usage levels
Interaction with Points of Interest
Commercial Flow

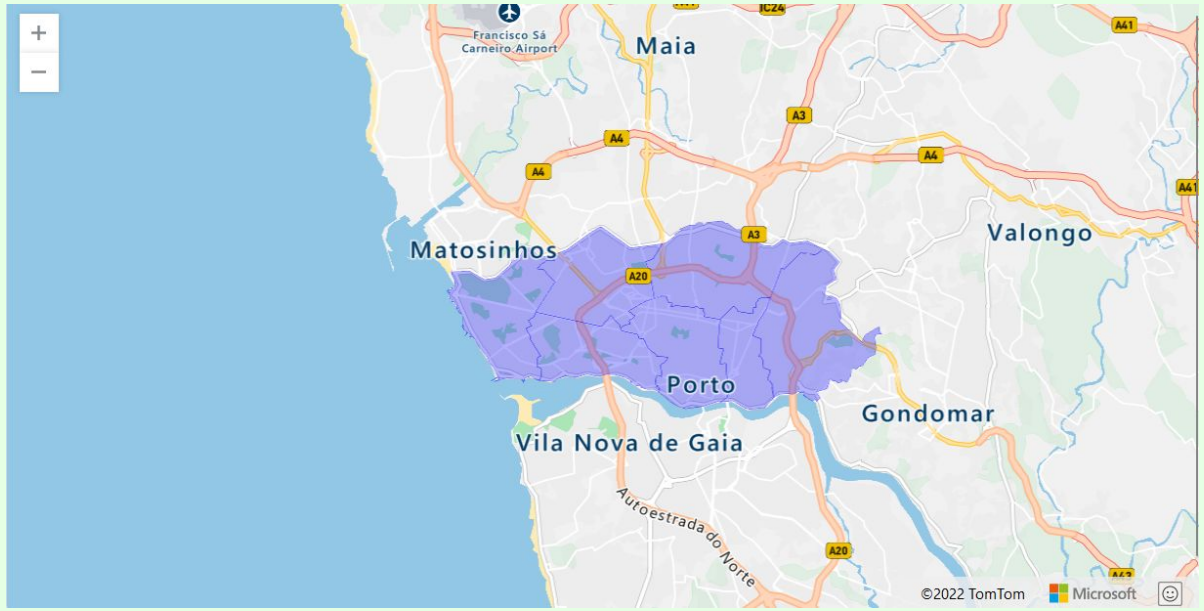
Solution - Supply

- Supply can be defined as the offers that a particular area, which the visitors can use and spend time on;
- Datasets used:
  - Cultural points of interest: “Cinemas”, “Estátuas”, “Bibliotecas”, “Miradouros”, “Monumentos”, “Museus e Centros Temáticos”, “Concertos”, “Teatros”;
  - Accessibility points: “STCP Paragens”, “Metro Paragens”, “Praças de Taxi”;

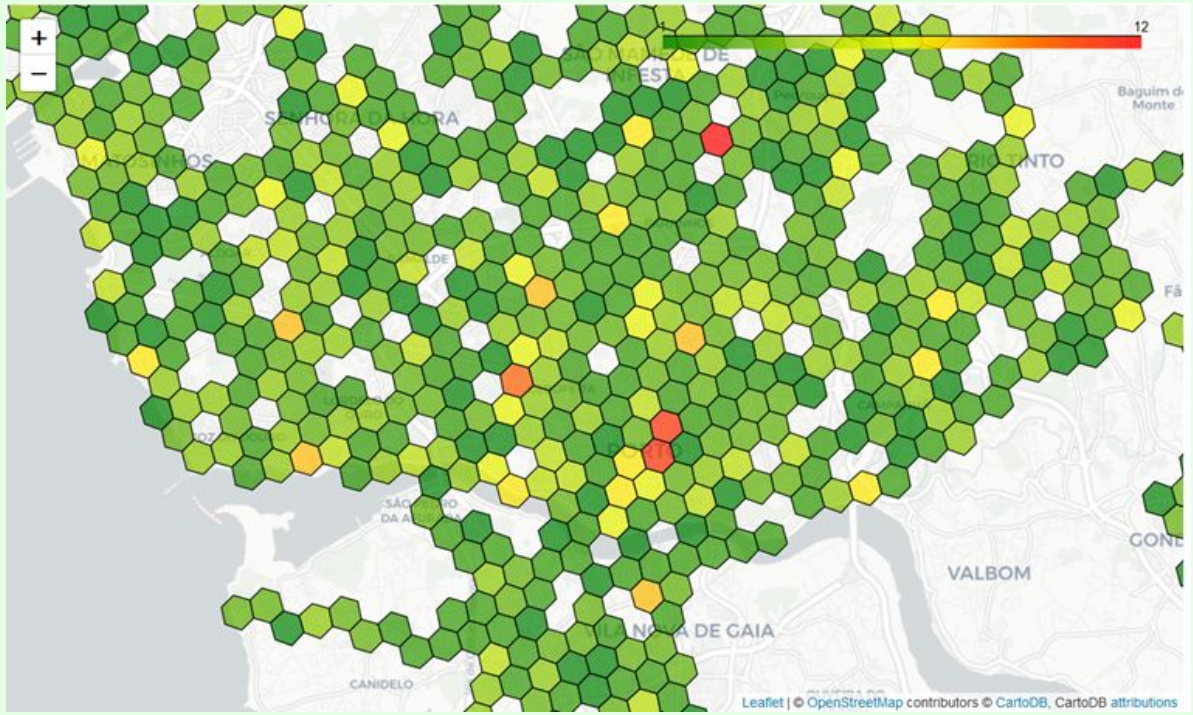
Solution - Demand

- Demand can be defined as the amount of search for products of services that exists in a particular area;
- Datasets used:
  - Internet usage: “Wifi AP”
  - Interaction with points of interest: “Points of Interest”
  - Transport usage: “E-scooter trips”

Solution - Geographical Division

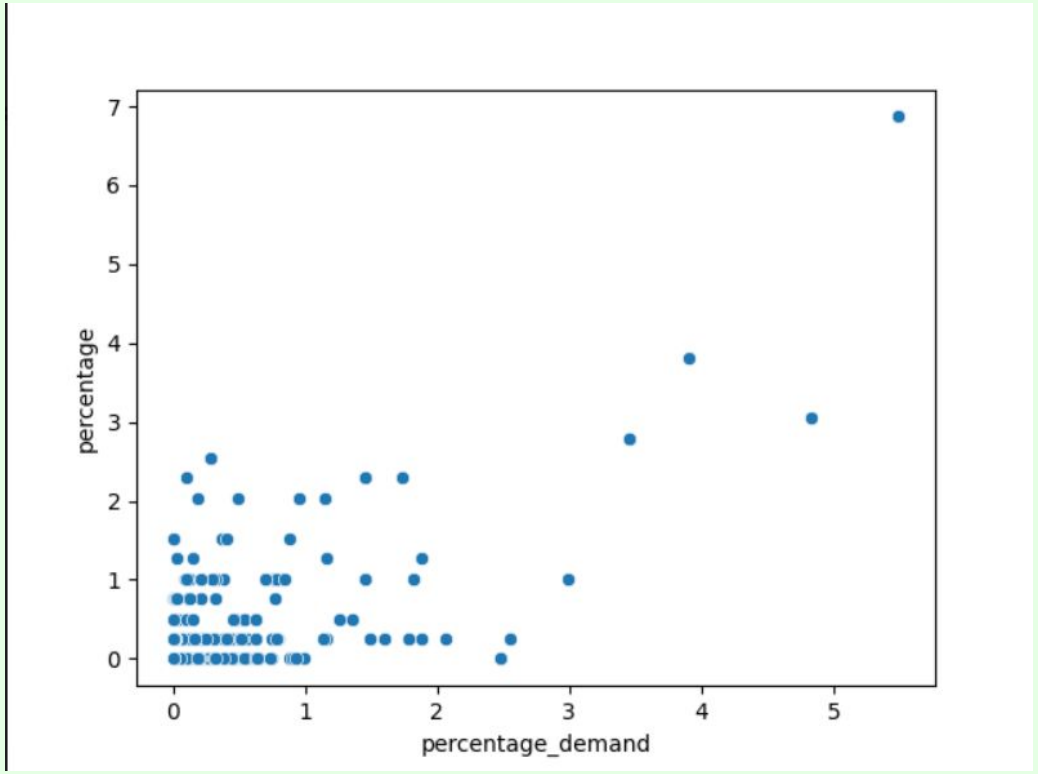


By Parish (source: @magamig, Github)



By Hexagon

Results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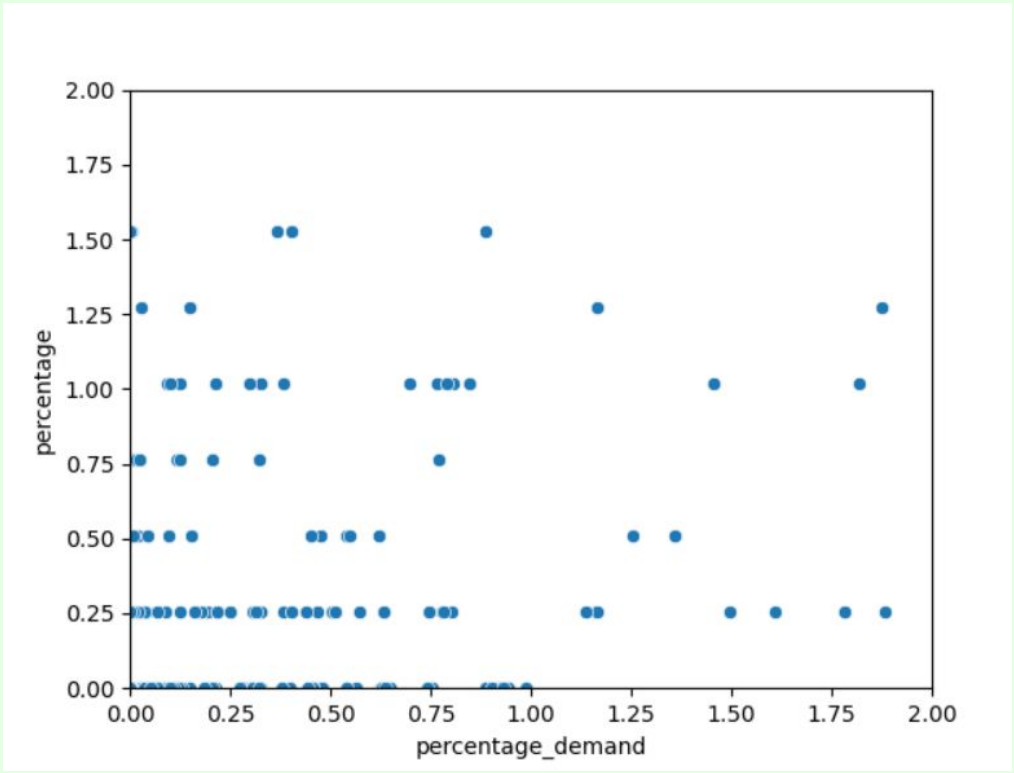
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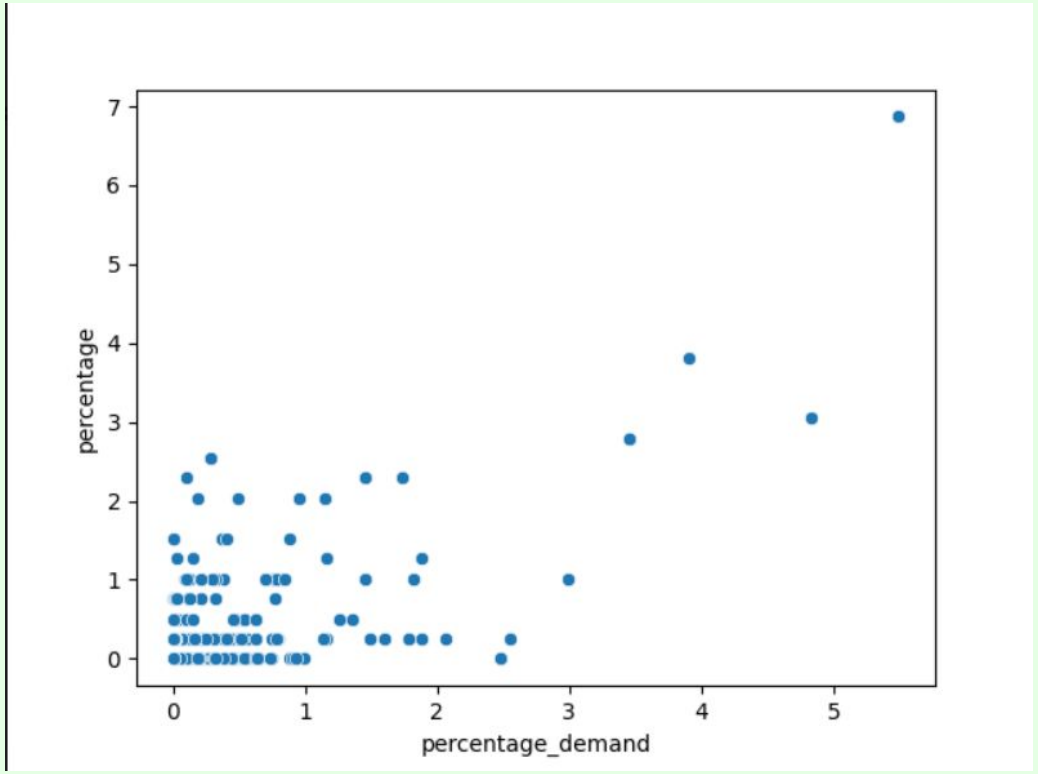
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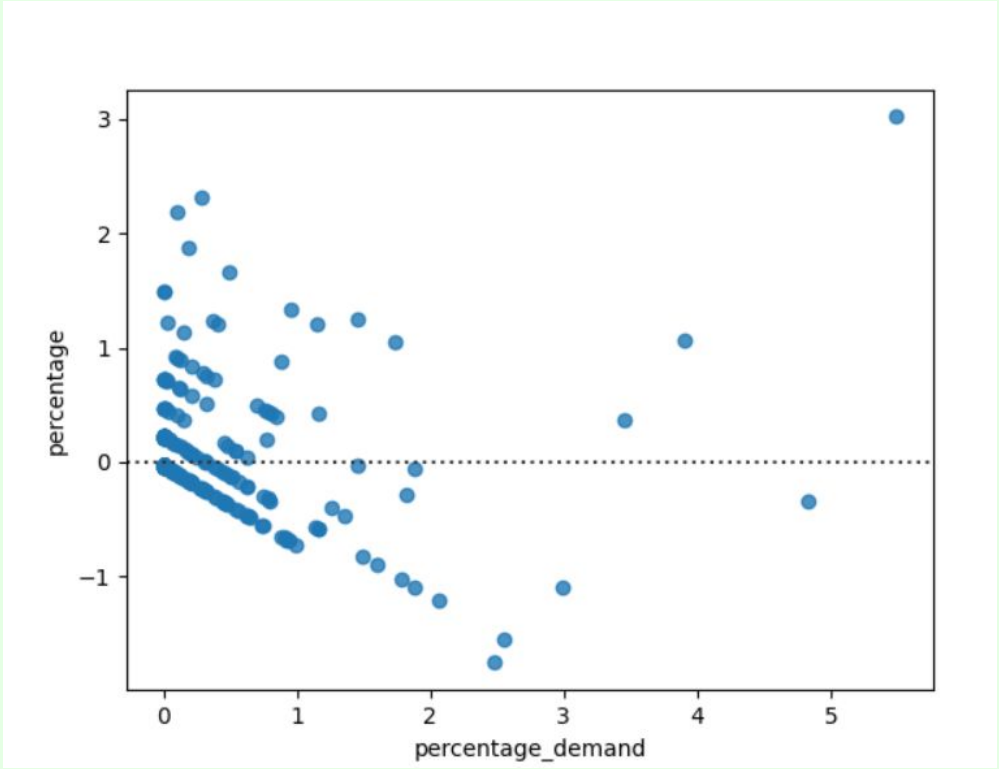
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Conclusion and Future Work

- Supply & Demand By Hexagons: Interesting and feasible;
- Major Risk: Lack of geographical location data;

Future Work

- Predict the demand in each hexagon;
- Understand areas which require more action (Less supply and high demand and vice versa);

Thank you!