

Optimisation of the Outdoor Advertising within Cities considering Environment and Sustainability

Challenge Provider: PSE

PSE is a company expert in Data Science and Advanced Research, which has been on the market since 1994. Since the beginning of its activity, PSE has been dedicated to Advanced Analytics. Today, this materialises in implementing technology solutions, advanced market research, and providing consultancy and data science services.

Context

Nowadays, cities are flooded by countless outdoor advertising panels, often with poor distribution, which has adverse effects on the city.

It is known that visual aspects are crucial in the urban planning process since each plan choice can generate obstruction of urban elements, thus producing adverse effects on the city's image.

Goals

Reducing the outdoor advertising visual impact in cities, minimising the reduction of the audience of the outdoor ad sector. Improving the visual environment of cities and the sustainability of the outdoor advertising activity.

A more careful organisation of outdoor advertising panels in cities will help achieve the 11th UN Sustainable Goal - Sustainable Cities and Communities, not only because it increases the visual quality of streets and roads but also allows to increase the focus on the message and the announcement that the panel intends to transmit.

Outcome

Create a model that optimises the number and location of the outdoor advertising positions in order to minimize the visual impact in urban environments. Consider also a better dimensioning and integration of outdoor advertising positions in cities.

Available Resources

All the data resource can be found here: <https://bit.ly/wdl-data>

The following list of resources is available for you to use. As a reminder, you can also use any data that is open, free and legally available.

Outdoor Panel Dataset

This dataset provides a list of outdoor advertisements in the entire territory of mainland Portugal with the number of average views and its maximum visibility.

Submissions

Deadline: 29 - 05 - 2021 @ 14h00 GMT + 1

Don't forget that you will need to deliver the report **using the template provided** (see below) and a 1-minute summary.

Submission template: <http://bit.ly/wdl-template>

Tips

- In addition, mobility data can be studied and integrated in order to understand places with high potential and lack of outdoor panels (see data from previous PSE challenge);
- Other open datasets might be crucial to solving this challenge;
- Don't forget to check the state of the art;
- If possible, don't forget to explain the outcome of your model.