Proyecto : Time series analysis and forecasting of criminal acts in Montreal

Integrates:

Edgardo Mattos

Manuel Pinedo

Introduction:

We have been hired by the Montreal Police Station to conduct an analysis and subsequently forecast criminal activities from 2015 to 2022. Additionally, we are tasked with determining how to effectively distribute police personnel based on the number of criminal acts in each area.

Technical milestones

1.Dashboard where we can visualize the insights of the analysis

2.Develop a predictive model to perform forecasting of the following months

Business objectives

3. To accurately identify the areas and time periods with the highest volume of criminal acts, in order to subsequently organize and plan the distribution of police personnel.

Source:

<https://donnees.montreal.ca/dataset/actes-criminels/resource/c6f482bf-bf0f-4960-8b2f-9982c211addd>

**Data Dictionary**

| **Columns** | **Type** | **Description** |
| --- | --- | --- |
| CATEGORIE | text | Type of crime |
| DATE | Date | Day of the crime |
| QUART | text | Hour range |
| PDQ | Int | Post de Quartier |
| X | text | Not used |
| Y | text | Not used |
| LONGITUDE | Float | Longitude Coordinates |
| LATITUDE | Float | Latitude Coordinates |