Exploratory Data Analysis Recipients of Social Protection Schemes

1.Abstract

Data is a singular unit taken from huge information on which certain actions are taken. The organization considers it a valuable asset due to information stored in the business and the operations. On the contrary, as information propagates day-by-day volume has also increased.

The data in my project shows Quarterly data on recipients of selected social protection schemes by county from Ireland.

3.Datasets Description

This data was provided by Department of Social Protection of Welfare by virtue of the Central Statistical Office in Ireland .Period of time covered between 2014-01-01 and 2021-09-30. Dataset shows 10 columns for 16,736 entries.

Structure of the data:

id: Unique number to identify each row

period: represents time of year

scheme: Subunit of scheme_ description

scheme_ description: shows the type of benefits

Basis: Subunit of scheme_description

county_code: County name abbreviations

county: county name

recipients: the number of recipients of social assistance

4.Inspiration

The main goal of the project is to develop, integrate, and share knowledge using new technologies to improve the production and outputs (products and services) of official statistics. After the recipients are classified by county we must answer some questions:

- 1. Which county have the largest number of recipients?
- 2. Is there any relationship between the total number of recipients in some county with the type of service provided (scheme).
- 3. Is the number of recipients increasing or decreasing over the years?
- 4. Is the service make differences over the year?

5.Tooles

There are several tools which are offered for data science project. However, tools chosen from open source platforms could be preferred. In my Project I will use Technologies: Python, Jupyter notebook, SQL.

Libraries: Pandas, Matplotlib, NumPy.

6.Expected Conclusion

Managing and communicating dataset to answering the above questions that transform data into actionable information .