Road Accident Analysis

Project Name: Road Accident Analysis.

Project Goal or Client Need: Creating a dashboard for road accident in 2021 and 2022.

Insights needed:

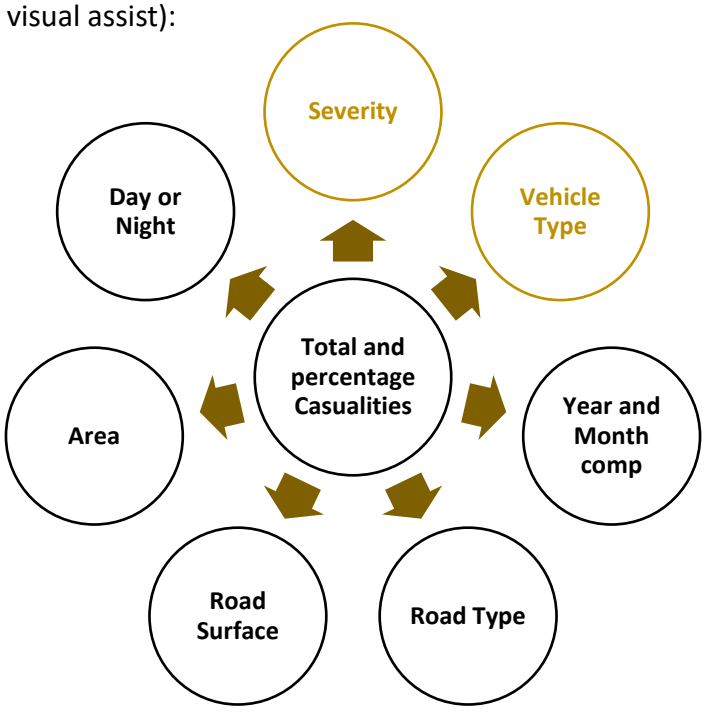
Primary KPIs	Secondary KPIs
- Total Causalities after accident - Total Causalities and percentage of total with respect to accident severity	- Total Causalities by vehicle type - Monthly comparison of causalities per year - Maximum causalities by road type - Distribution of total causalities by road surface - Relation between causalities per area and in day or night.

What we got: An xlsx. File with 3.07 M rows and 21 fields

(Accident index – Accident date – Day of week – junction control – junction detail – Accident severity – Latitude – Light condition – District – Hazards – Longitude – Number of causalities – Number of vehicles – Police – Road surface – Road type – Speed limit – Time – Urban or Rural – Weather – Vehicle Type)

According to needed insights we chose the targeted columns to work with we still need to adjust some and that will be in the coming steps.

Creating relations (for some visual assist):



Steps

Data Cleaning:

- I added a filter to exclude all wrong, missing data or type errors.
- I insured that the primary key (Accident Index): has no duplicates or blanks.
- I insured that the date was in 2021 and 2022 only.
- I checked the rest or targeted rows to detect blanks or spelling mistakes.
- I found out that severity has 4 labels 2 of them are fetal and fatal so I joined them into fatal.

Data Processing: I added year and month column.

Data Analysis, Data Visualization and Dashboard Making: They are all explained the xlsx. Analysis sheet I made.

File and project detailing Credits to: Me

Project credits to: @datatutorials1 YouTube channel.

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