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| Report Of Road Accident |
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| For year -2021 & 2022  - Sourabh Desai  7378873306 |

# Road Accident in UK (2021-22)

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| Analysis and Visualization of Accidental Data. BRIEF-  I have created an Visuals in Microsoft Excel by analyzing the Dataset of United Kingdom     * I have downloaded the Dataset from Kaggle . I have mentioned the link from which I have downloaded the Dataset.   **Link**  “ https://drive.google.com/file/d/1R\_uaoZL18nRbqC\_MULVne90h3SdRbAyn/view “    **REQUIREMENTS -**  Basically the Requirement which I felt that was-   * The end product to be created i.e Dashboard that must be Road Accident Dashboard for Year 2021 and 2022. * To get the Insight     **Primary KPIs**   * Total Casualties taken after Accident. * Total Casualties and Percentage of total with respect to accident severity and maximum casualties by type of vehicle.   **Secondary KPIs**   * Total casualties with respect to Vehicle type. * Maximum casualties by road type. * Monthly trend line showing compassion of casualties for year 2021 and 2022. * Distribution of total casualties by road surface. * Relationship between casualties by Area /Location/Day/Night. |

# Things Done While Creating The Project

* Data Collection.
* Data Cleaning.
* Data Analysis.
* Data Visualization.
* Creation of Report /Dashboard.
* Detection of insight/conclusion.

Data Collection/Data Gathering :-

* As I have mentioned earlier I have collected the dataset from Kaggle website which I have mentioned the link . “https://drive.google.com/file/d/1R\_uaoZL18nRbqC\_MULVne90h3SdRbAyn/view “
* As it is open source this dataset is randomly generated for study purpose.

**Dataset -**

* Rows- 3.07 M
* Fields – 21
* File extension – xlsx

Data Cleaning :-

* There are lot many minor things done while cleaning the dataset . I will mention the important things done in data cleaning.
* Basically in dataset year column/filed was missing which was important and primary requirement for doing analysis and displaying visuals, because our requirement was having year wise comparison.
* Hence I derived the year column/filed with the help of data column.
* Similarly Month column derived .
* For creation of pivot table there shouldn’t be any null values so I removed the null values.
* In accident severity column there was data misspells so I removed that by find and replace because typo error can harm and same word with different meaning can affect ,so I removed that [FATAL - FETAL]

**Data Analysis :-**

* In this part I have analysis the entire master sheet and looking toward the requirement there was all kinds of field by which pivot tables can be generated
* Hence for comparison I was having year column.
* Looking towards the requirement I was having all the fields
* By analyzing the master sheet I created pivot tables one by one

Data Visualization:-

* Basically I have added one Timeline and one slicer .
* Timeline usually represents the years and month and quarter.
* Slicer is for accident in Ruler and Urban area.
* Four doughnut chart have been made for representation of casualties by accident severity.
* Tree chart is made for casualties by road type , in this I have made new group of data by adding group by (Snow/ice, Dry, Wet)
* I have used icons so to represent the total casualties by particular type of vehicle. For this I also made new group because in data there were more types of vehicle so grouped them in (Bus, Tractor, Car, Bike, Van ,Other)
* I have arranged all the pivot tables in a single sheet so that new person can easily analysis or get what have done in the dashboard.

Report/Dashboard:-

* All these charts I arranged in a single sheet and renamed it with working dashboard
* I have used icons for representing the dashboard ,Mail, Data analysis and these icon I have used hyper link to connect it and by clicking on that icon it gets redirect to particular sheet or mail or website i.e Wikipedia of United Kingdom.
* From this project by doing technical analysis and visualization I got some of the insights .

Insights :-

* Accident by cars and number of casualties are more by cars as compared to other vehicle type.
* As people are getting aware about accident number of casualties are getting decreased day by day. Trend line in my dashboard represent the trend of present year and previous year casualties.
* Casualties in urban area is more as compared to rural area.

Stackholders-

* Ministry of Transport.
* Road Transport Department.
* Police Force.
* Emergency Service Department.
* Public.
* Media.
* Road Safety Crops.
* Transport Department.

This are the department and peoples which can get better idea by looking towards my dashboard and visuals.

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