# **Exploratory Data analysis**

**Global Terrorism** 

**Project by-Sunil Kumar** 

#### **AGENDA**

Data preparation. Most attacked region. Most attacked year. Number. Of attacks in year and territory. Most attacked region globally. Visualization. Percentages of attackers. Attackers interest of target. Number of people killed by attackers. Al-Qaida gang. Country exceeding sum of killing. Most active gangs.

#### **DATA PREPARATION**

- Libraries
- •pandas, seaborn.
- •%matplotlib inline. matplotlib.pyplot. !pip install folium. Folium.

### **Handling Null**

- •data.isnull()
- •Identifying null values in the columns& dropping those.
- •approxdate 94.914993%, related 86.219461% of null values in these two columns.

### **Understanding data using:**

- df.head(), df.tail, df.shape(),df.dtypes, type(df),df.describe(),df.corr(),df.summ ary.
- •Understanding important columns and dropping others.

### **Important Visualization**

- Sns.heatmap()
- •ma= mp.Map()
- •plt.bar()
- •sns.barplot()
- •pd.crosstab()
- WordCloud()

#### MOST ATTACKED REGION

Country with most attacks: Iraq

City with most attacks: Baghdad

Region with the most attacks: Middle East & North Africa

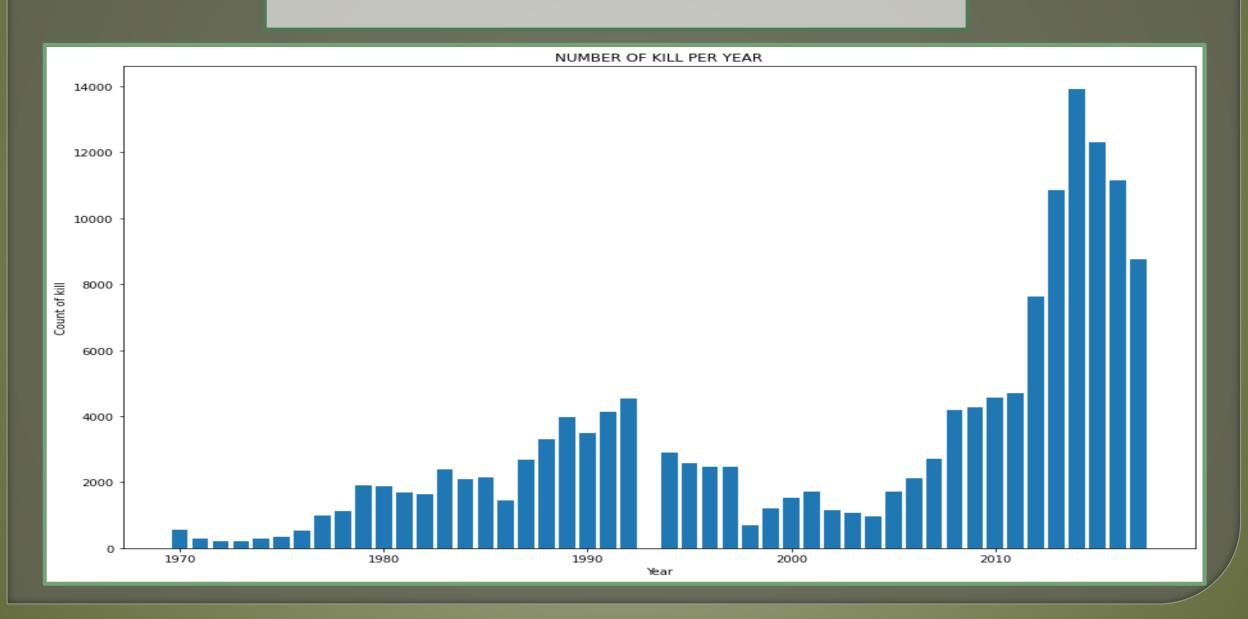
Year with the most attacks: 2014

Month with the most attacks: 5

Group with the most attacks: Taliban

Most Attack Types: **Bombing/Explosion** 

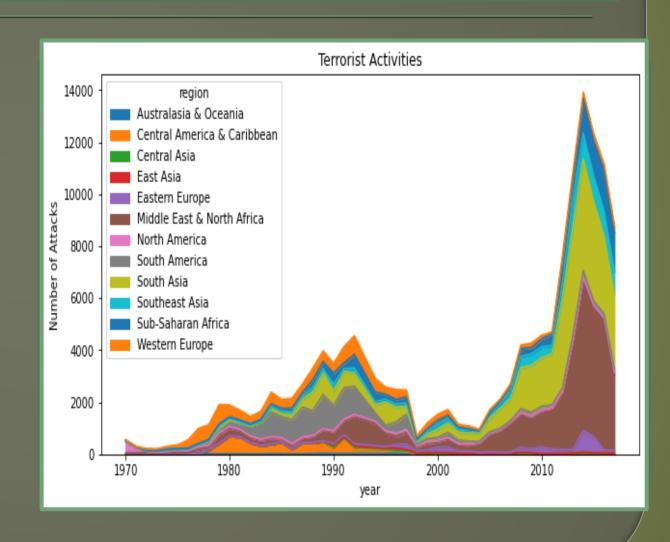
### **MOST ATTACKED YEAR**



### NUMBERS OF ATTACKS IN YEAR AND TERRITORY

Most attacks were made in 2014 on Australasia & Oceania.
Moving 1970-90 most terrorist attacks occurred in Western Europe, than Sub-Saharan Africa, South east asia, South America and South Asia as well.

After 2010 trend we can say that there have been rapid attacks in 2010-2014 and so next years.



### MOST ATTACKED REGION GLOBALLY

Map shows 4 location as per coordinates with most attacked country.

- •Basra
- Mosul
- •Kirkuk
- Baghdad



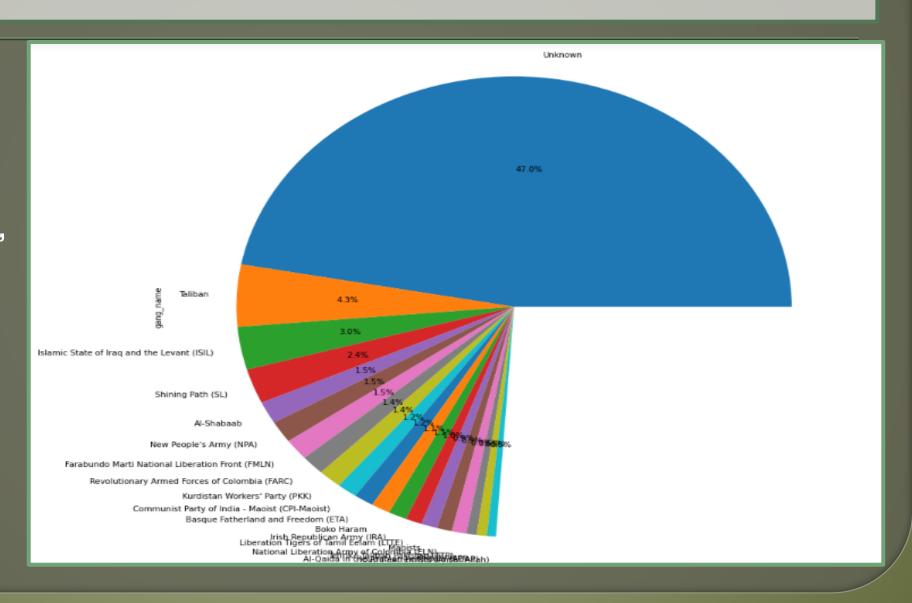
### WORDCLOUD VISUALIZATION

This picture explains that there are more repeated attacks as per the word cloud frequency Baghdad, Khyber, Pakhtunkhwa, Al Anber, Northern Ireland, Federally Administered. Followed by Administered Tribal, Kashmir west Bank, San Salvador and Jammu.



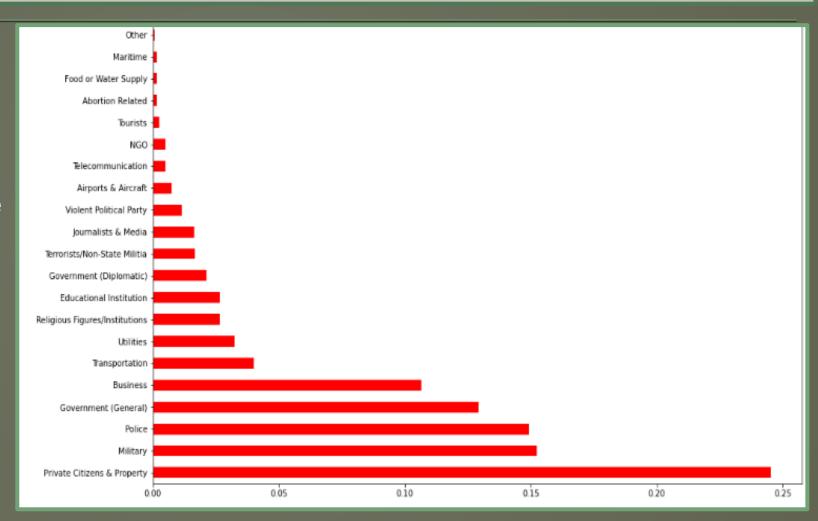
### PERCENTAGES OF ATTACKERS

This pictorial representation shows that we have 47% of attackers which are Unknown, Then Taliban 4.3%,ISIL 3.0%,Shining Path(SL) 2.4% Al Shabaab 1.5% followed by New People's Army 1.5% And list goes on.



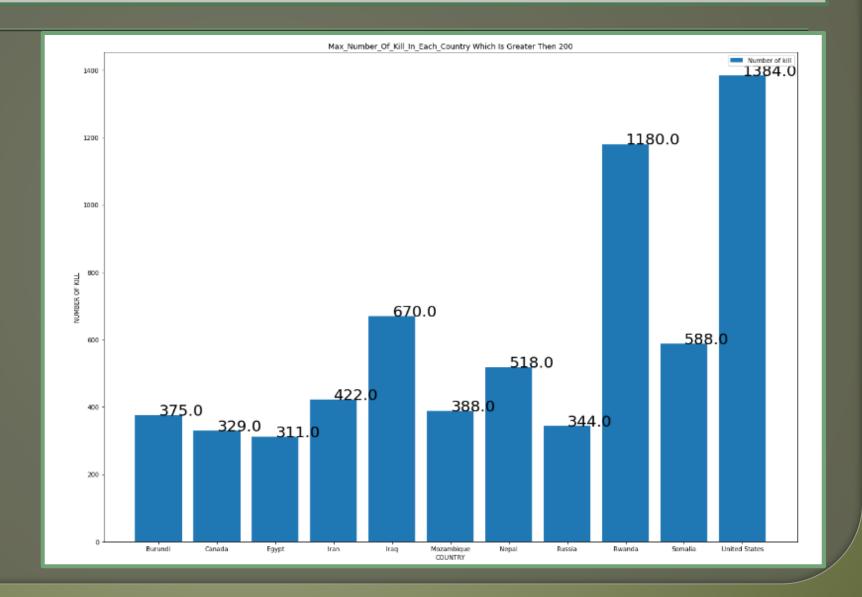
### ATTACKERS INTEREST OF TARGET

Mostly Targeted for the attacks are Private Citizens & Property, Military, Police, Governme nt(General), Business and Transportation. Followed by utilities, Religion institutions, Educational institution, Government(diplomatic).



### NUMBER OF PEOPLE KILLED BY ATTACKERS

This pictorial representation tells us that we have more number of killing from United States 1384, followed by Rwanda 1180, Iraq 670, Somalia 588, Nepal 518, Iran 422 and others with 300 and more killings.



## **AL-QAEDA GANG**

Al -Qaeda have done most number of killings.

Often used weapons:

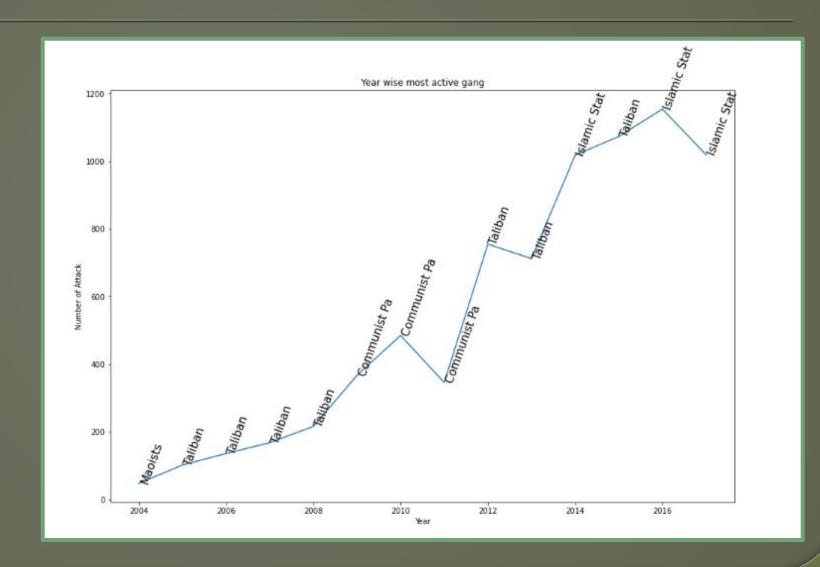
- •Explosives and vehicle-borne explosive.
- •Year 2001 performed more than 1 attack on US.



### **MOST ACTIVE GANGS**

We gets to know that we have most active gangs:

- •Taliban.
- •CPI-Maoist.
- •ISIL.
- •Showing more numbers of attacks with years in an increasing trend.



### **COUNTRY EXCEEDING SUM OF KILLING 3000**

Countries	Number of killings
Iraq	21510
Pakistan	12756
Afghanistan	10871
India	10491
Colombia	6865
Philippines	5843
Peru	4916
Turkey	3767
El Salvador	3369
Thailand	3346
United Kingdom	3212

