

Capstone Project - 1

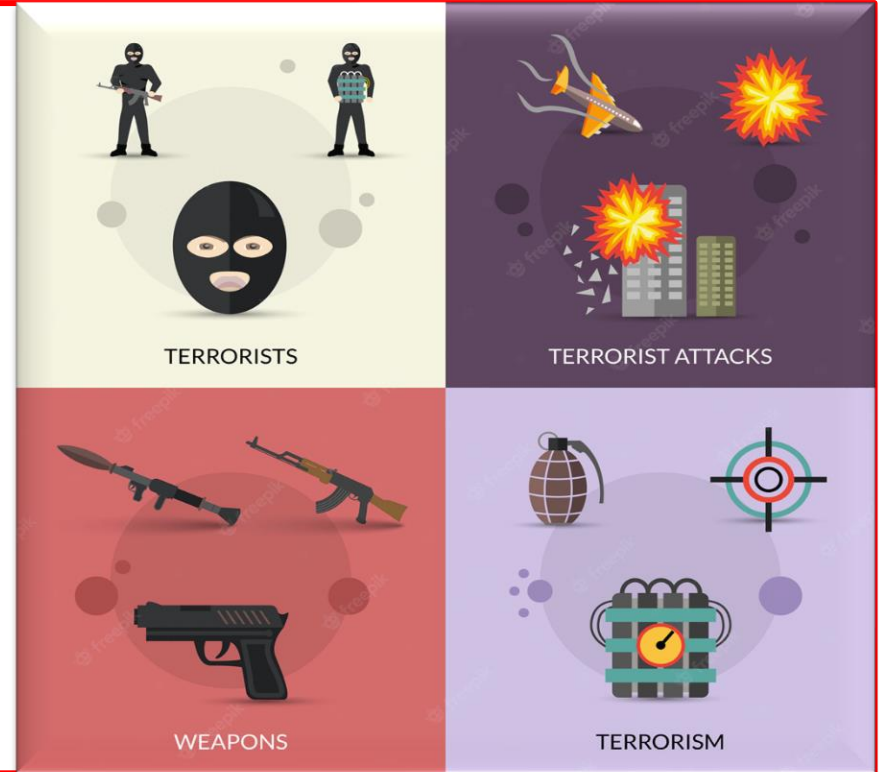
Global Terrorism Analysis

Presented By
Shreyash Sunil Jagdale

- Problem Statement
- Data Summary
- Data Cleaning
- Analyzing Data
 - Global Trend
 - Casualties and Property Damage
 - Region wise and Country wise trend
 - Attack types, target types, preferred weapons and most active organisation.
- Challenges
- Conclusion

Problem Statement

The objective of the project is to understand the terrorist events around the world. By making use of interactive charts and animations we have tried to make the exploration easy and more informative.



Data Summary

- **iyear:** Year in which event (attack) took place.
- **country_txt:** Name of the country which was attacked.
- **Region_txt:** Name of the region where the particular country belongs to.
- **City:** Name of the city which was attacked.
- **Success:** Whether attack succeeded or failed.
- **Attacktype_txt:** Type of attack.
- **Targettype_txt:** Type of target.
- **Gname:** Name of the organisation or terror group.

Data Summary (contd.)

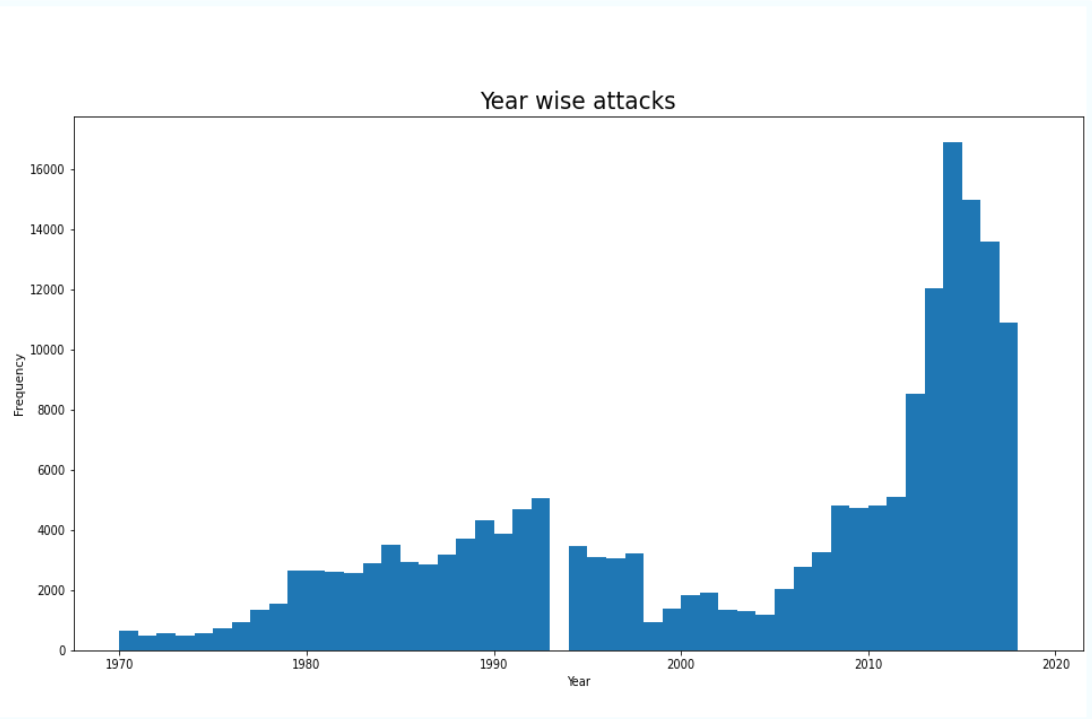
- **weaptype1_txt:** Type of weapon used for attack.
- **nkill:** Number of people killed during attack.
- **nkillter:** Number of terrorists killed during attack.
- **nwound:** Number of wounded people during the attack.
- **propextent:** Extent of which property is damaged.
- **propvalue:** Value of the damaged property.

Data Cleaning

- There were 4 columns that are of interest which contained null values: total kill, total terrorists kill, total wounded and property damage value.
- ✓ we replaced all the null values of the columns total kill, total terrorists kill and total wounded with mean values of that columns as they all are count values
- ✓ While we replaced null values of the column property damage value with its mode.

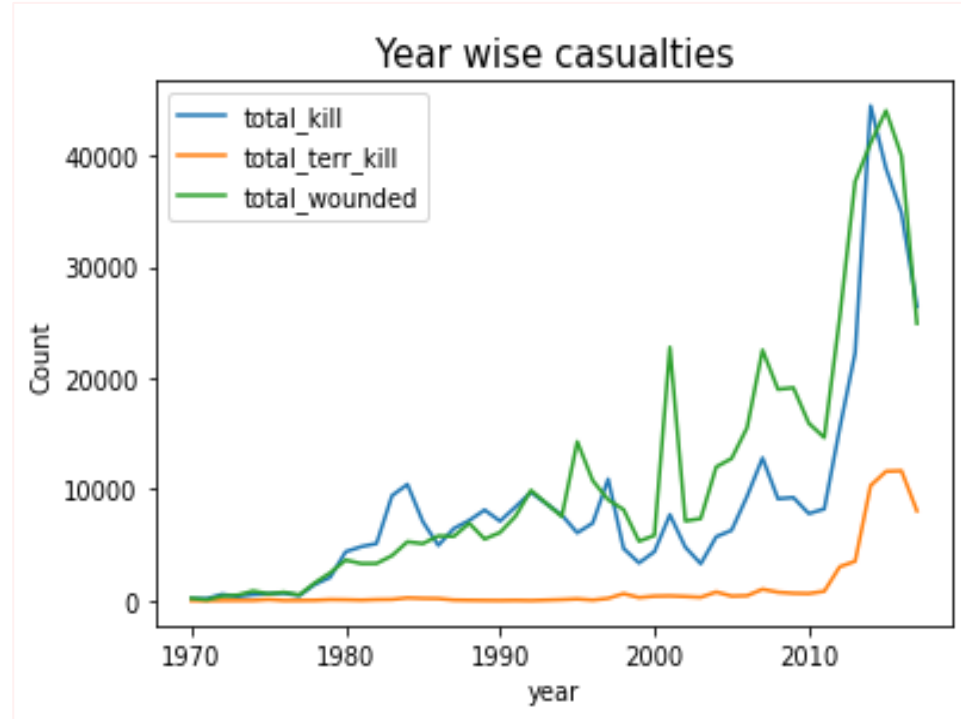
Data Analysis (Global Trend)

- ✓ Before 2000 the frequency of the attacks was increasing very slowly.
- ✓ After that it decreased to some extent but since 2005 it has increased very sharply
- ✓ It peaked in the year 2014



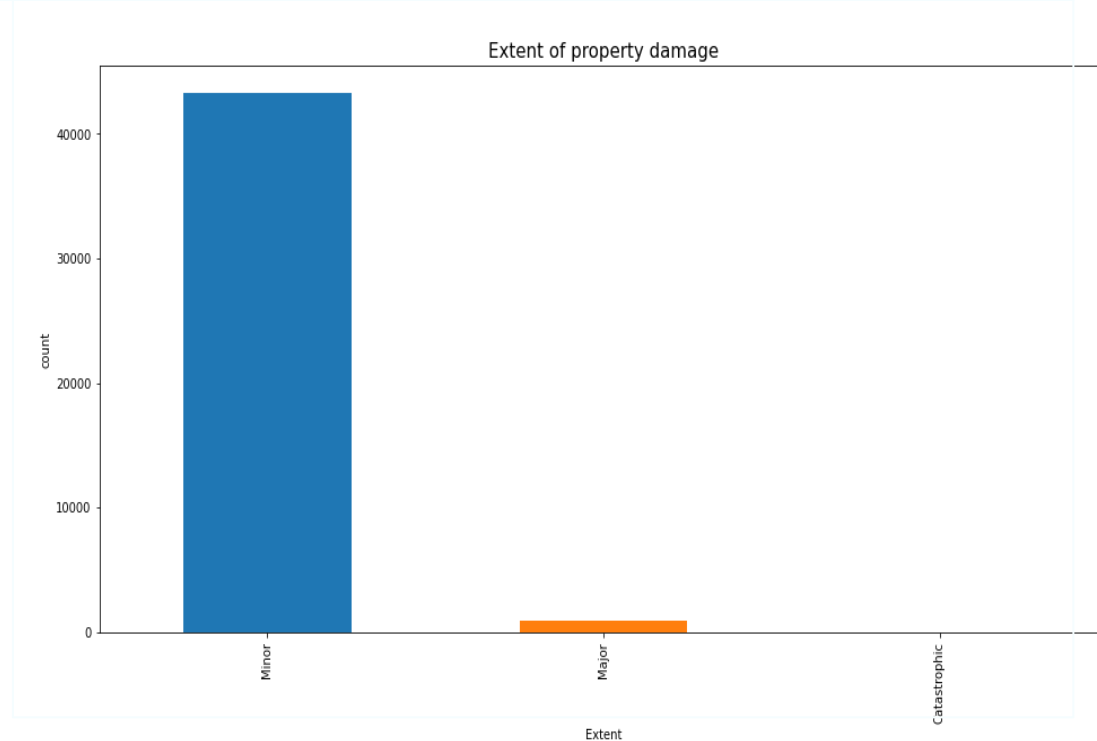
Data Analysis (Casualties and Property Damage)

- ✓ Number of killed and wounded citizens increased slowly over the years.
- ✓ Number of terrorists killed was constant over the years and far more less compared to citizens killed
- ✓ All three counts increased sharply after 2010 because of increased number of attacks during that period



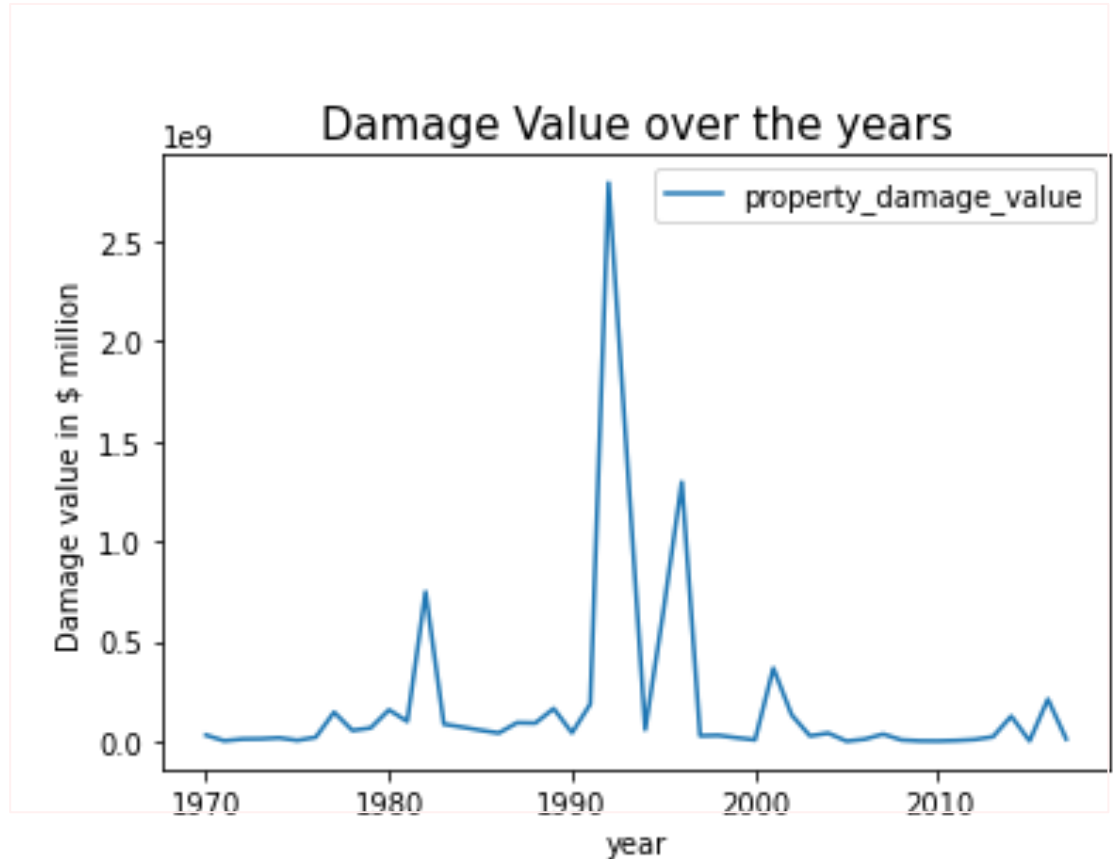
Data Analysis (Casualties and Property Damage) contd.

- ✓ Extent of damage for most of the properties was minor that is damage value up to \$1 million.



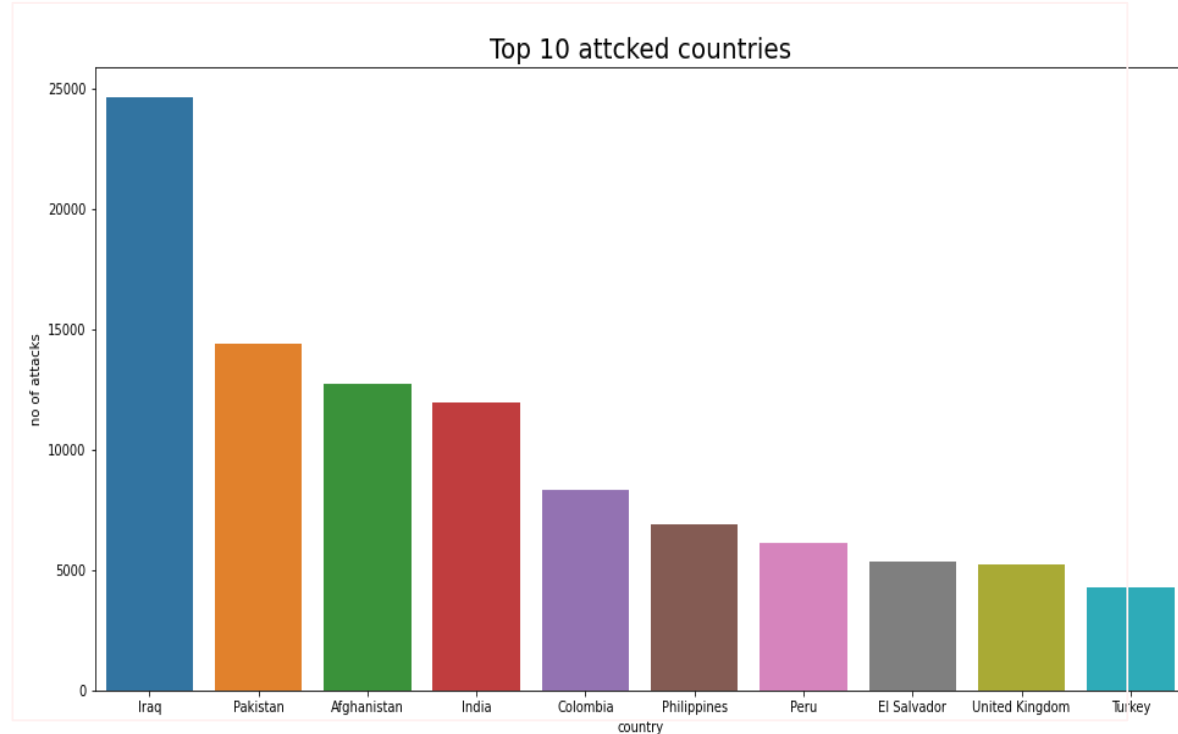
Data Analysis (Casualties and Property Damage) contd.

- ✓ Total damage value of properties was up to \$1 million for most of the years. But, for some years the damage was Catastrophic



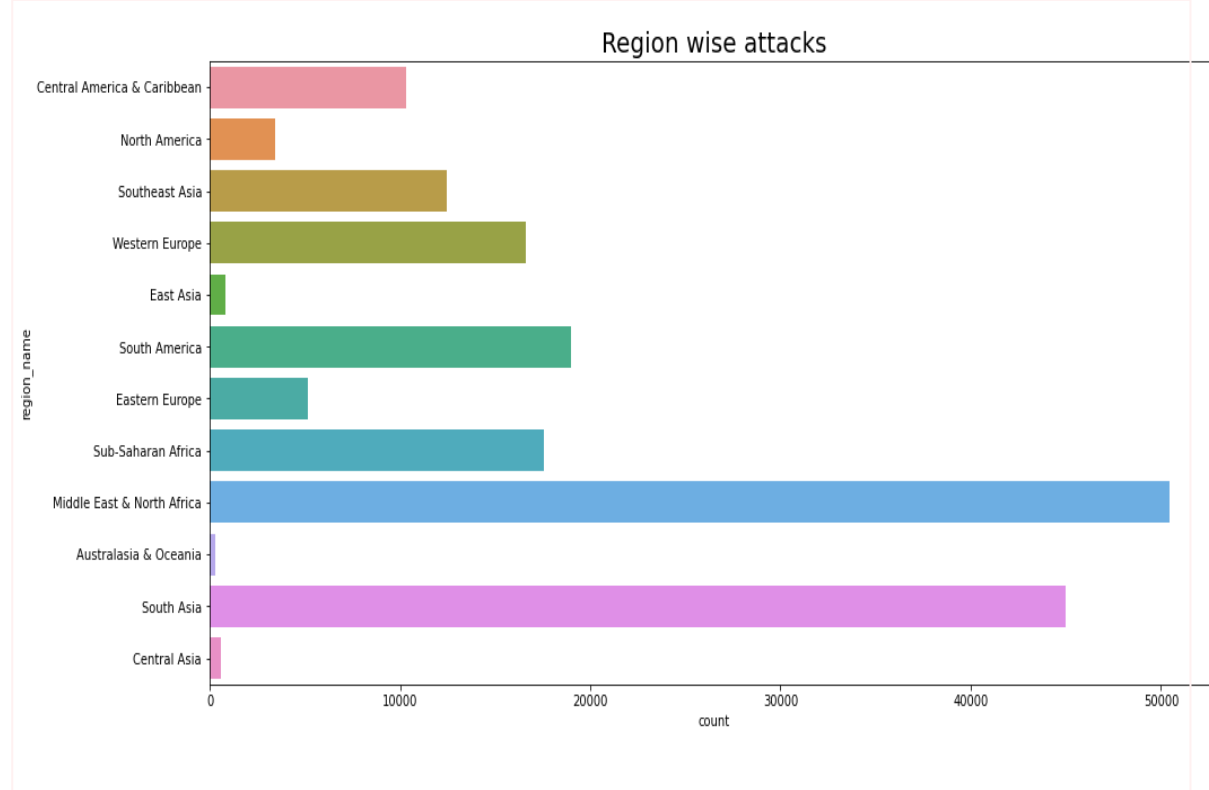
Data Analysis (Region wise and Country wise trend)

- ✓ Iraq is the country with the highest number of terrorist attacks followed by Pakistan and Afghanistan.



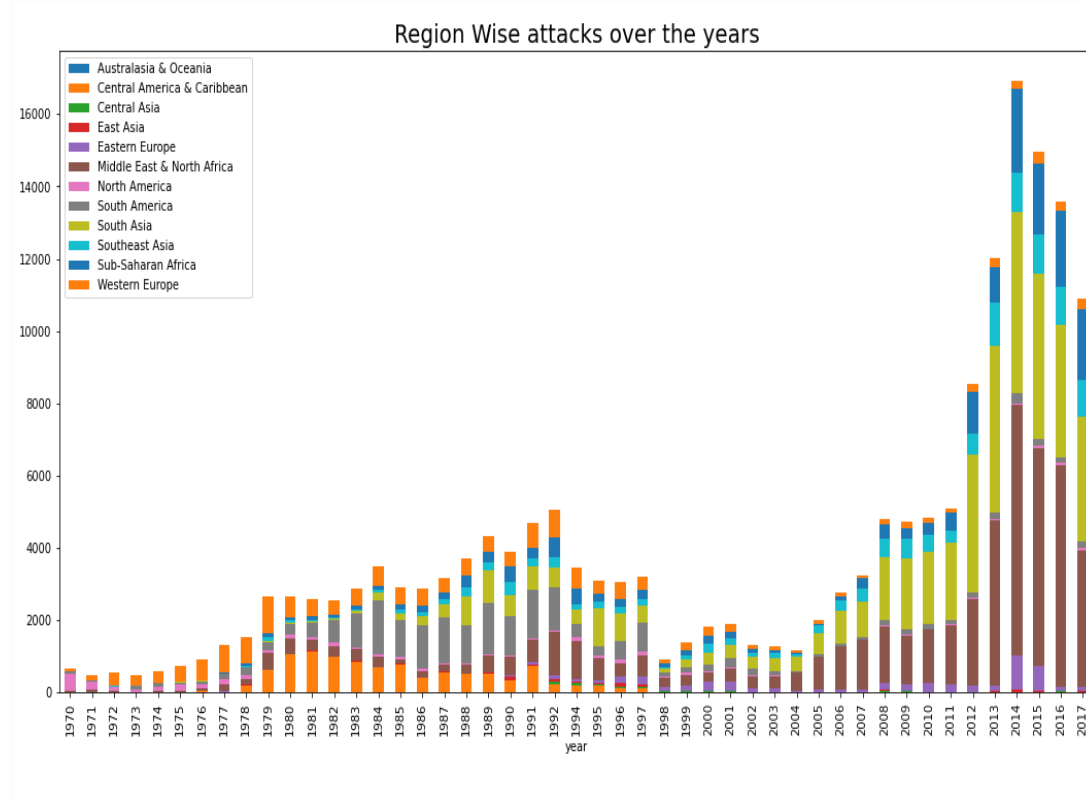
Data Analysis (Region wise and Country wise trend) contd.

- ✓ Middle East and North Africa is most vulnerable region to the terrorist attacks followed by South Asia and South America.



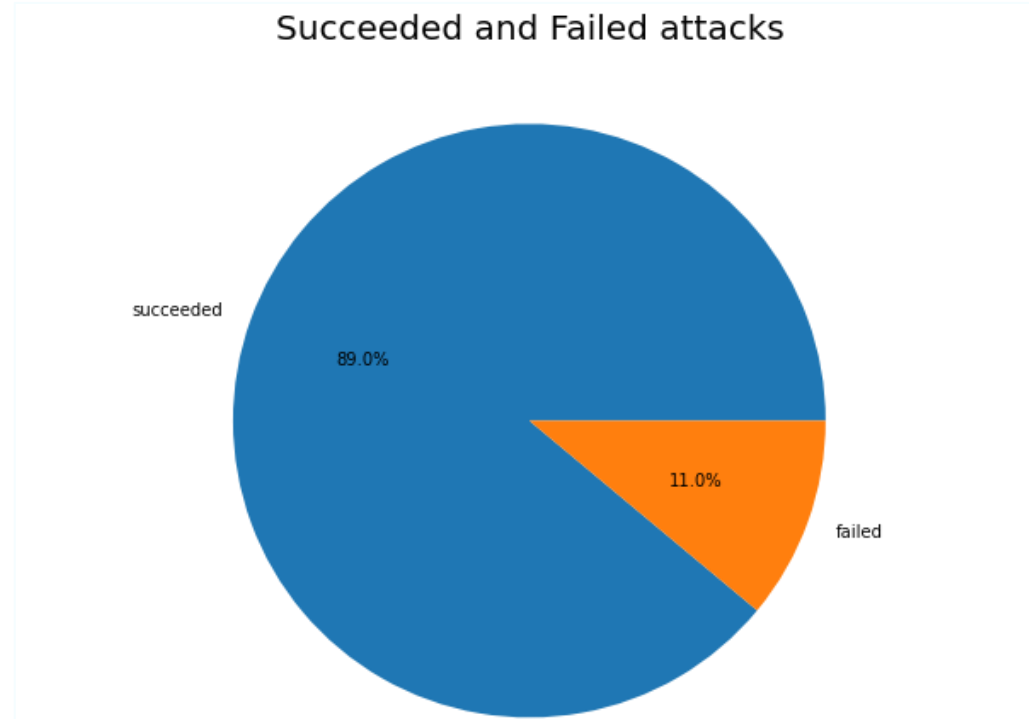
Data Analysis (Region wise and Country wise trend) contd.

- ✓ It seems that attacks were most frequent in South America around 1980's
- ✓ Since, last two decades Middle East and North Africa as well as South Asia has experienced highest number of attacks



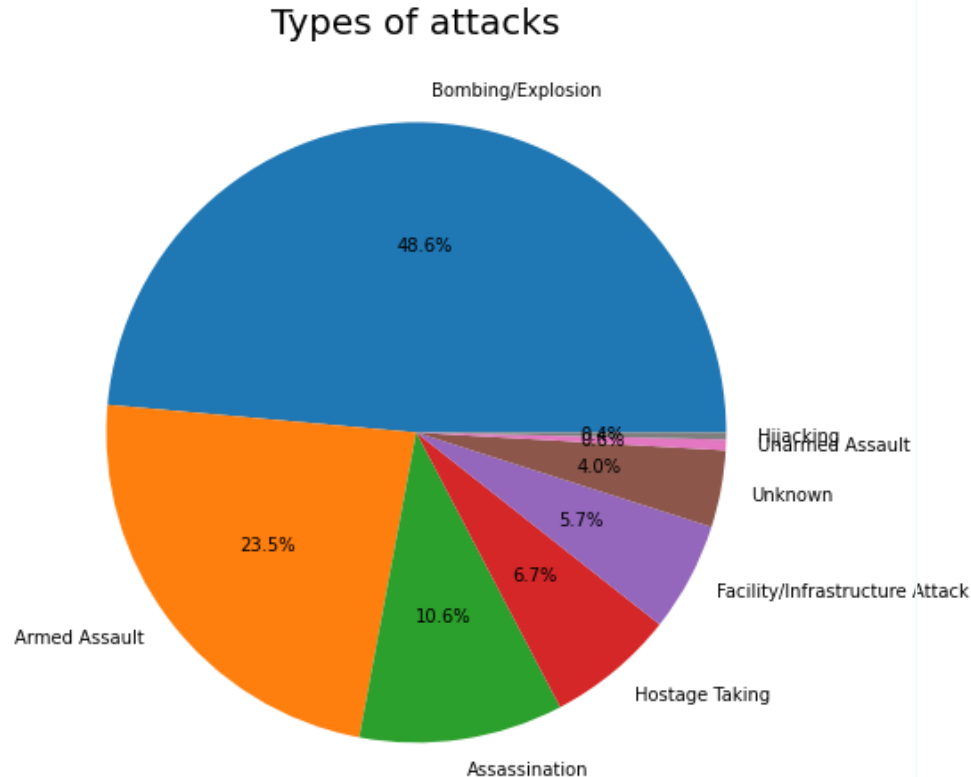
Data Analysis

- ✓ Most of the attacks attempted (around 89 %) were successful



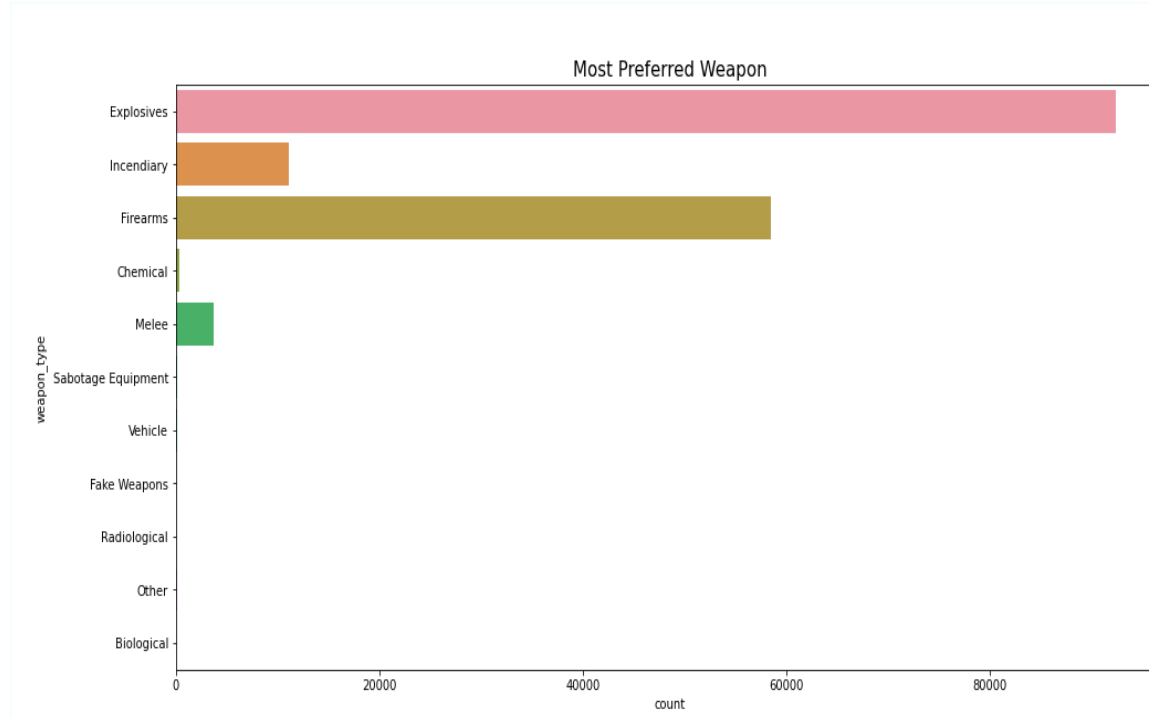
Data Analysis (types of attack)

- ✓ Almost half of the attacks are of the type Bombing and Explosion followed by Armed Assault.
- ✓ while Hijacking and Unarmed Assault are least in numbers.



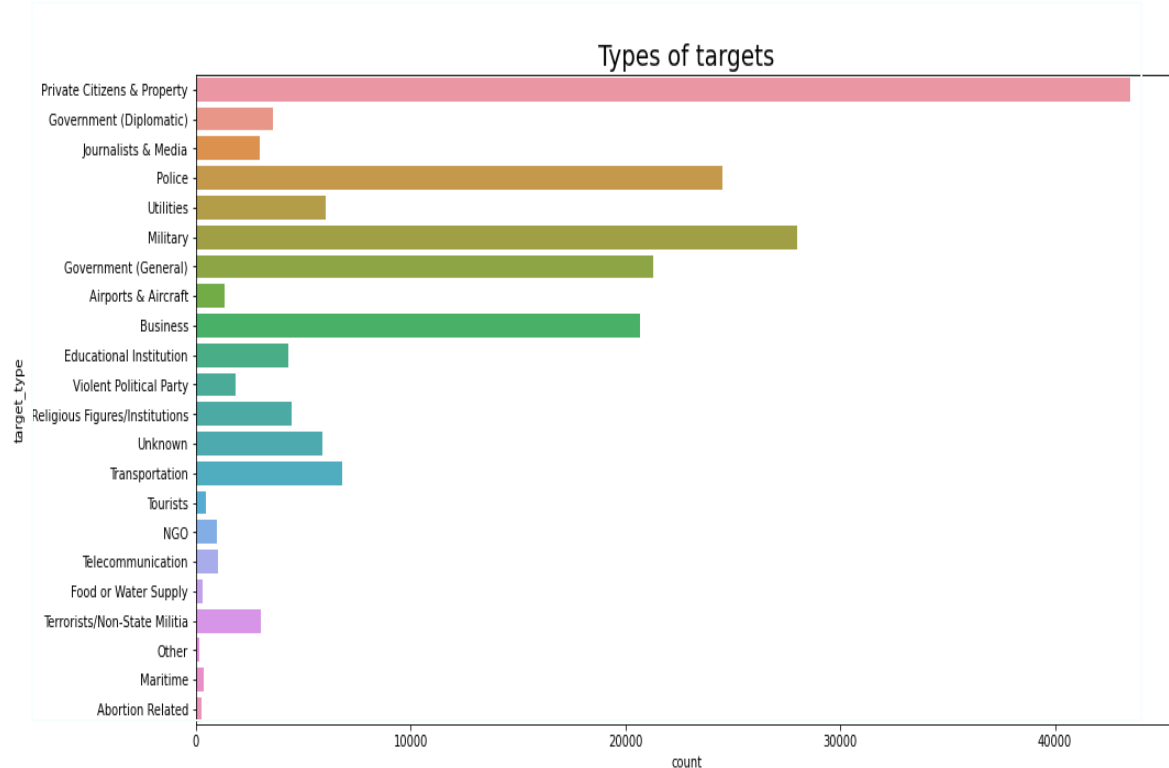
Data Analysis (preferred weapon)

- ✓ Explosives or bombings are the most preferred weapon by attackers followed by Firearms that is guns.



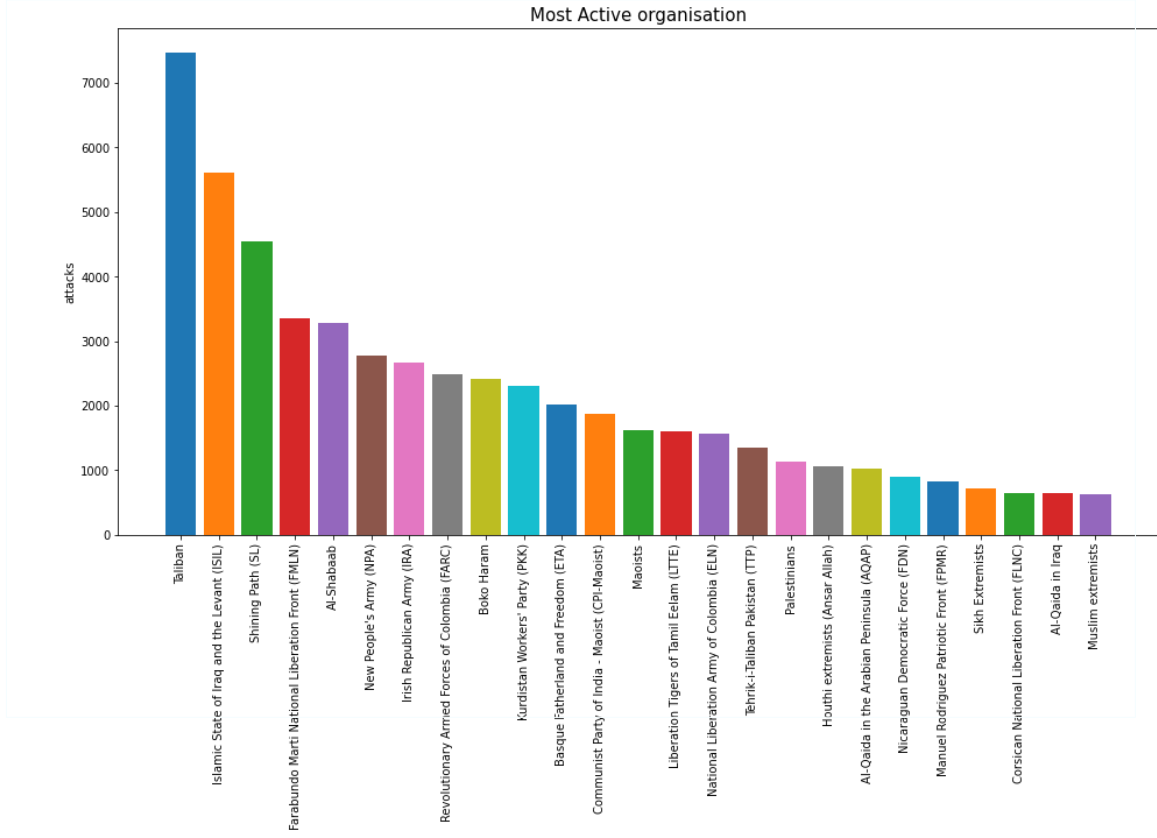
Data Analysis (Target types)

- ✓ Private citizens and property are the most common target for the attackers
- ✓ while maritime, abortion related and tourists are not targeted very often



Data Analysis (Active Organization)

- ✓ Taliban is the most active organisation or the terror group followed by ISIL.



Conclusion

- From the study, it can be drawn that the frequency of attacks has increased sharply since the year 2005.
- As the attacks are increasing, the casualties also increase proportionally.
- Extent of damage for most of the properties is minor but sometimes attacks cause major as well as catastrophic damage to the properties.
- Iraq is the country with the highest number of terrorist attacks followed by Pakistan and Afghanistan.
- India is fourth in row.

Conclusion (contd.)

- Middle East and North Africa is most vulnerable region to the terrorist attacks followed by South Asia and South America.
- Middle East and North Africa as well as South Asia has experienced highest number of attacks over last two decades.
- Most of the attacks attempted are successful.
- Almost half of the attacks are of the type Bombing and Explosion.
- Attackers prefer explosives or bombings most as their weapon.
- Private citizens and property are main target for the attackers.
- Taliban is the most active terror organisation.

Challenges

- Understand the meaning of the columns.
- Find the right chart to show the change of trends across each region.
- Some variables contained categorical values with similar meanings.

Q and A