Capstone Project

GLOBAL TERRORISM ANALYSIS

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Rise Of Terrorism

INTRODUCTION

Terrorism can be broadly understood as a method that utilizes or threatens to utilize violence in order to spread fear and thereby attain political or ideological goals.

Modern terrorism can be traced back to nineteenth century revolutionary radicalism, and the emergence of "anarchist",
Technological developments in the mid and late nineteenth century also played   pivotal role in the rise of terrorism

We have GTD – global database of terrorism and analyzing to it we can find out the reason and get more relevant information with respect to rise of terrorism.
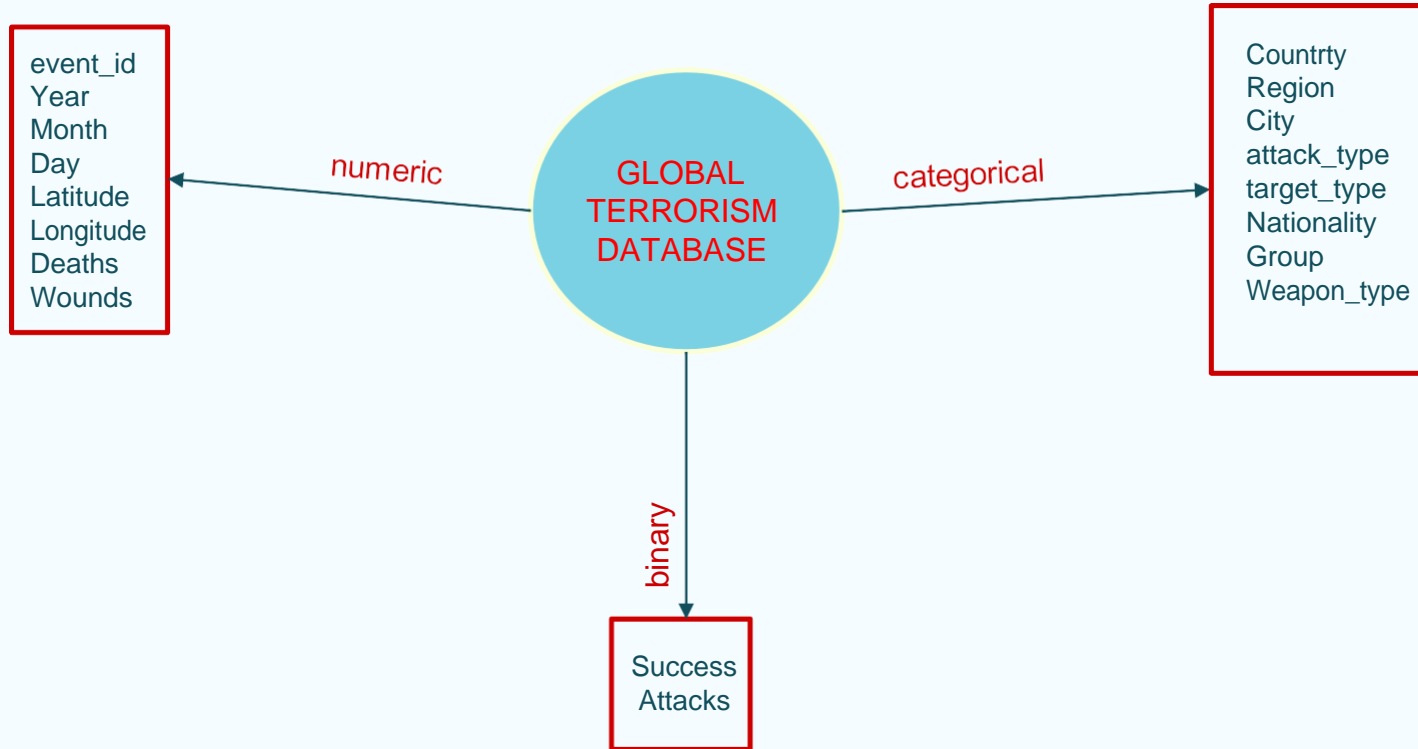
Global Terrorism Database

What is GTD ?

The Global Terrorism Database (GTD)™ is the most comprehensive unclassified database of terrorist attacks in the world.
The GTD is an open-source database, which provides information on domestic and international terrorist attacks around the world since 1970, and now includes more than 200,000 events.

Defining Terrorism

"The threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation."

DATA SUMMARY

numeric

event_id
Year
Month
Day
Latitude
Longitude
Deaths
Wounds

GLOBAL
TERRORISM
DATABASE

categorical

Countrty
Region
City
attack_type
target_type
Nationality
Group
Weapon_type

binary

Success
Attacks

DATA SUMMARY

event_id :- Each attack can be identified by it's unique id i.e. event_id.

latitude & longitude:- Helps in identifying the exact location of the attack

Deaths & Wounds :- Helps in identifying the total casualty happened in the attack.

DATA SUMMARY

Success :- It tells us that whether the terrorist was able to achieve his motive or not.

Patterns :- It tells that if the patterns of the attacks.

attack_type :- This gives us information about the type of the attack, i.e. Armed Assault, Assassination, Bombing/Explosion, Facility/Infrastructure Attack, Hijacking, Hostage Taking (Barricade Incident), Hostage Taking (Kidnapping), Unarmed Assault,

DATA SUMMARY

Nationality :- It tells the nationality of the target. Suppose there is an attack taking place in USA but on Israel's embassy then the nationality will be Israel as the target belongs to Israel.

Weapon_type :- The type of the weapon used by the terrorists during the attack, i.e. Explosives, Firearms and Incendiary.

Group :- The associated terrorist group with the attack if identified.

DATA CLEANING AND DATA ENGINEERING

The total columns in the data were 135 initially. The columns having null values greater than 70% were removed, in this way total 48 columns were retained rest were removed from the data.
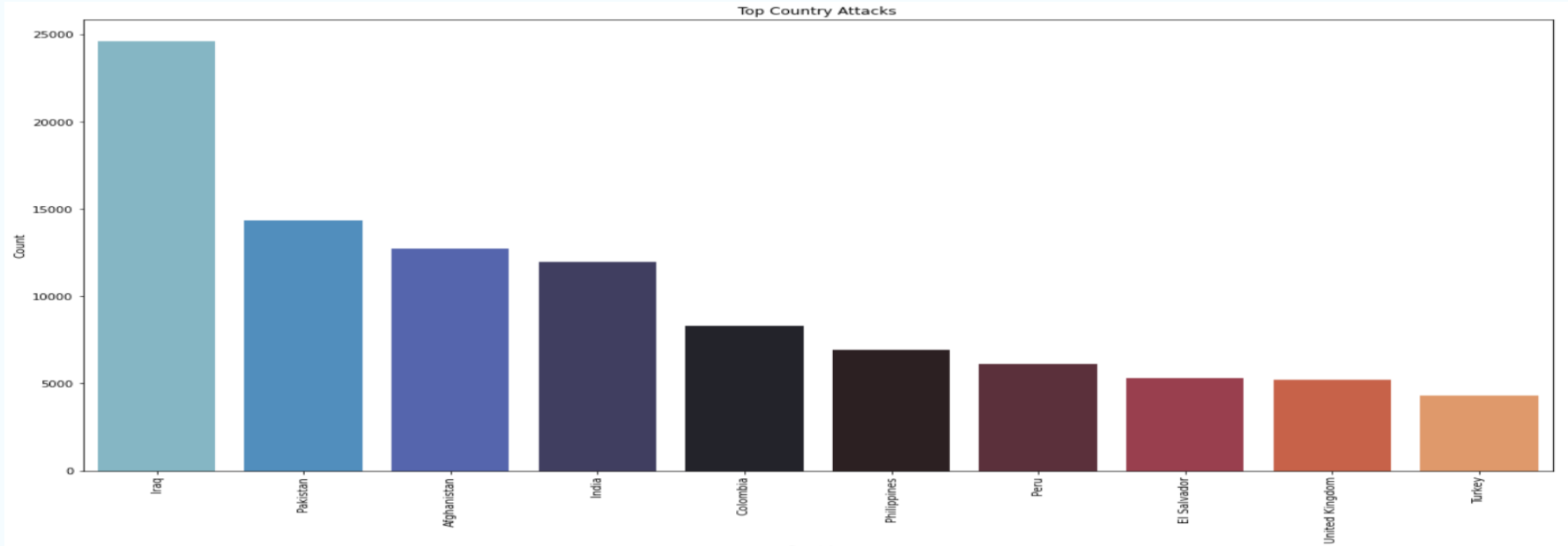
21 columns were found relevant and have been used in the EDA.

Name of the columns used :-

'event_id','Year', 'Month', 'Day', 'extended', 'Country', 'Region', 'City', 'Latitude', 'Longitude', 'Multiple', 'Success', 'Suicide', 'attack_type', 'targt_type', 'Nationolity', 'Group', 'Individual', 'weapon_type', 'Deaths', 'Wounds'

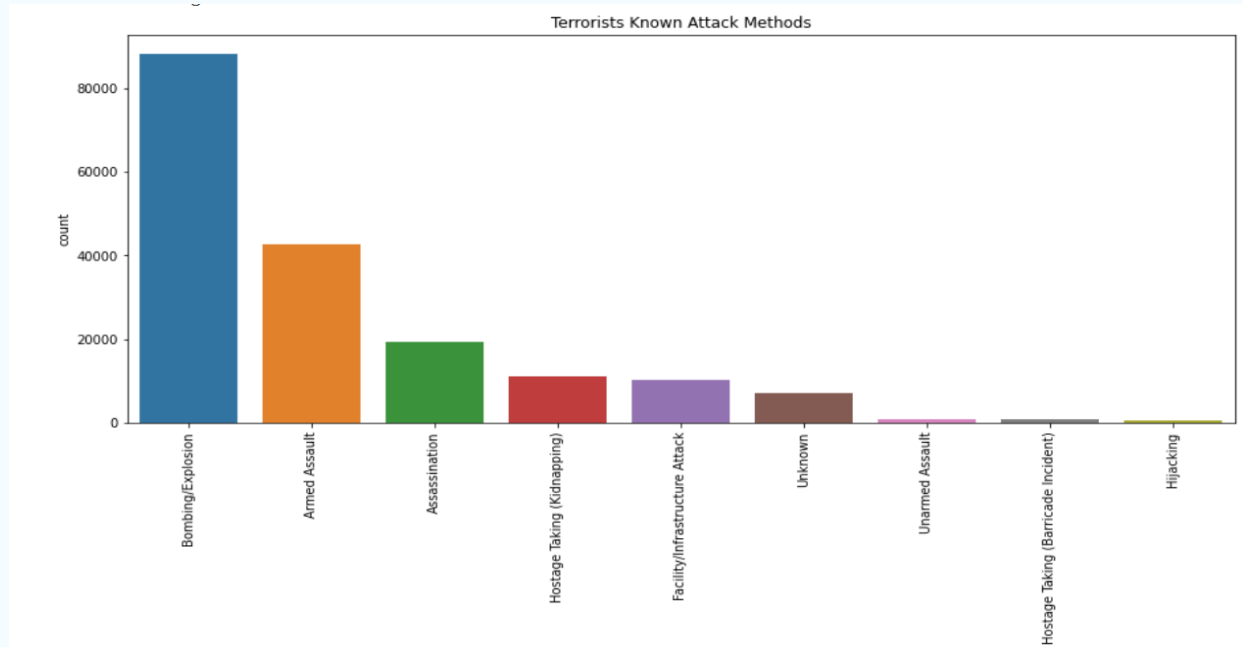# EXPLORATORY DATA ANALYSIS

MOST ATTACKED COUNTRIES

The top four most affected countries by terrorism are Iraq, Pakistan, Afghanistan and India.
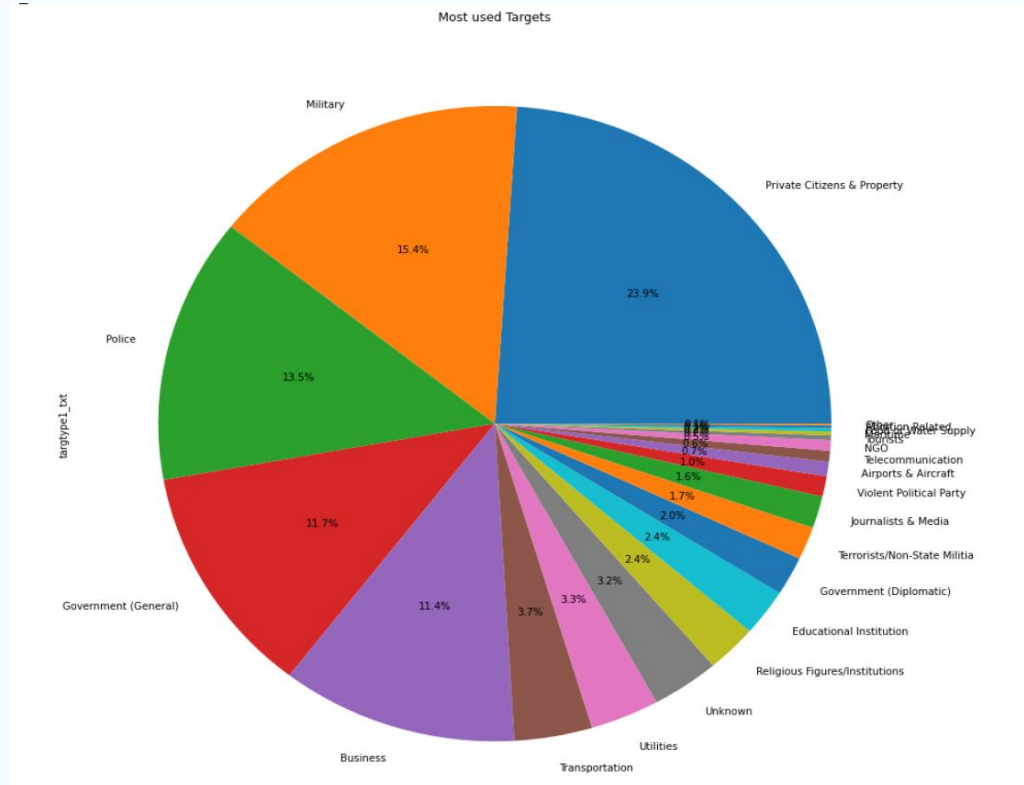
Different types of attacks used by the terrorists over years

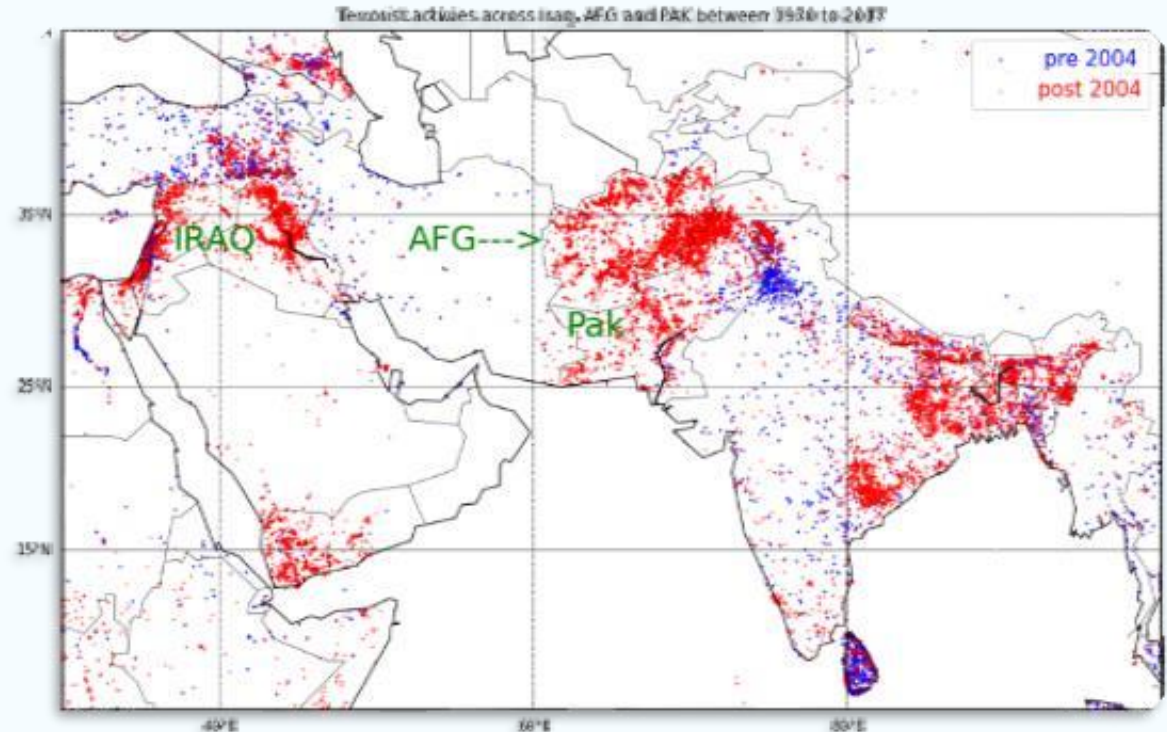Most attacks were Bombing and Explosion and then the armed assaults.

MOST USED TARGETS

The most used target for attacks by various terrorist organizations is Private properties and on citizens followed by attacks on military infrastructures
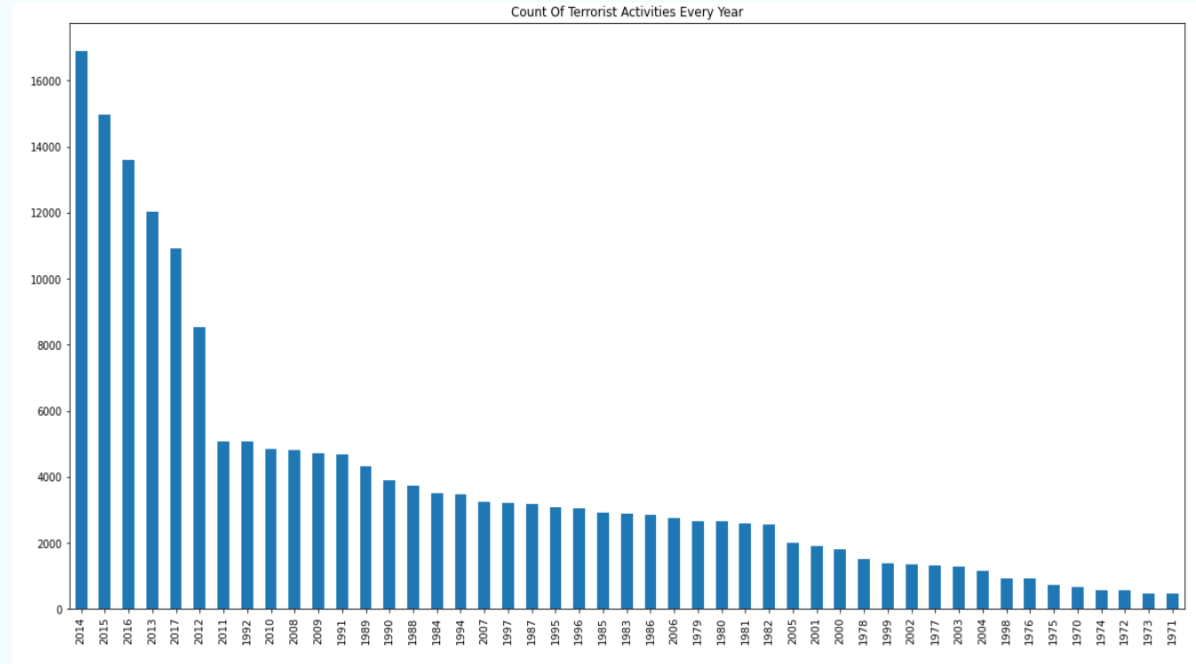
TERRORIST ACTIVITIES IN THE WORLD

The main focus is on the top countries where terrorist activities were seen due to which we can see the steep rise in number of attacks since 2005 over the Globe.

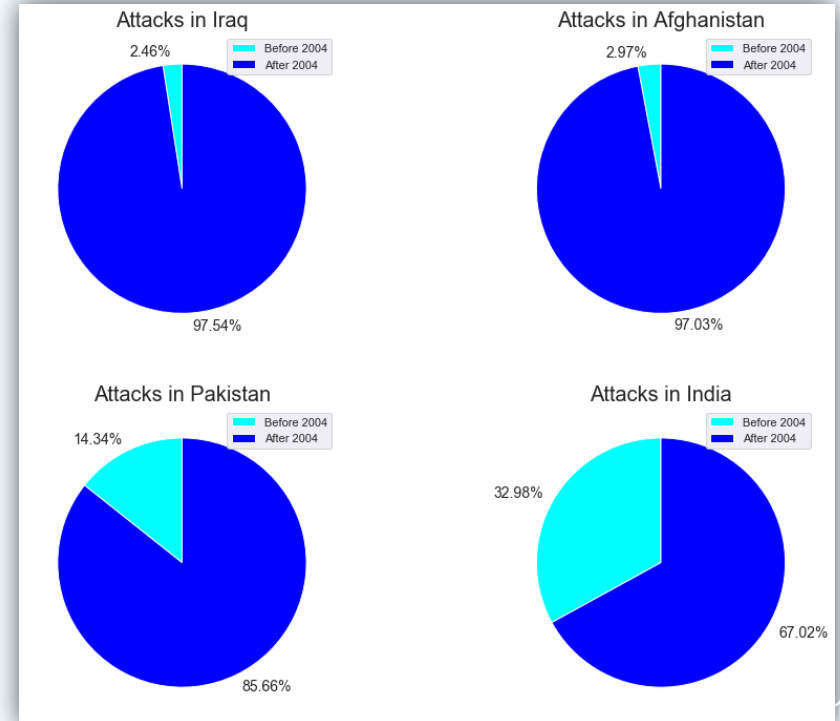Terrorist activities across Iraq, AFG and PAK between 1930 to 2017

COUNT OF TERRORIST ACTIVITIES EVERY YEAR

Most number of people lost their lives in terrorist attacks were from Iraq than Afghanistan than Pakistan than India

Count Of Terrorist Activities Every Year

ATTACKS IN TOP FOUR COUNTRIES BEFORE & AFTER 2004

In the countries Iraq, Afghanistan and Pakistan there is a tremendous increase in the attacks after 2004 but in India's case is not like that, there were attacks in India before 2004 also this means terrorism is a major issue for India since a very long time.
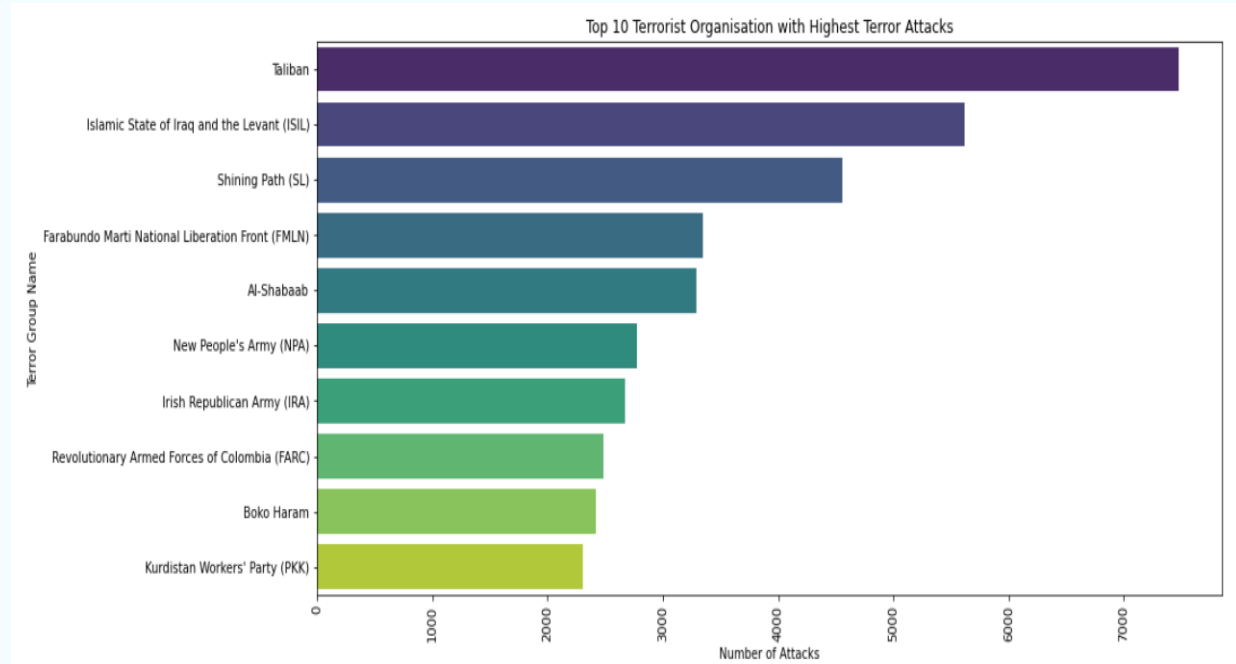
MAJOR TERRORIST GROUPS BEHIND ATTACKS

In Iraq the major terrorist group involved in attacks was Islamic State of Iraq and the Levant(ISIL) this was the time when Islamic State emerged.
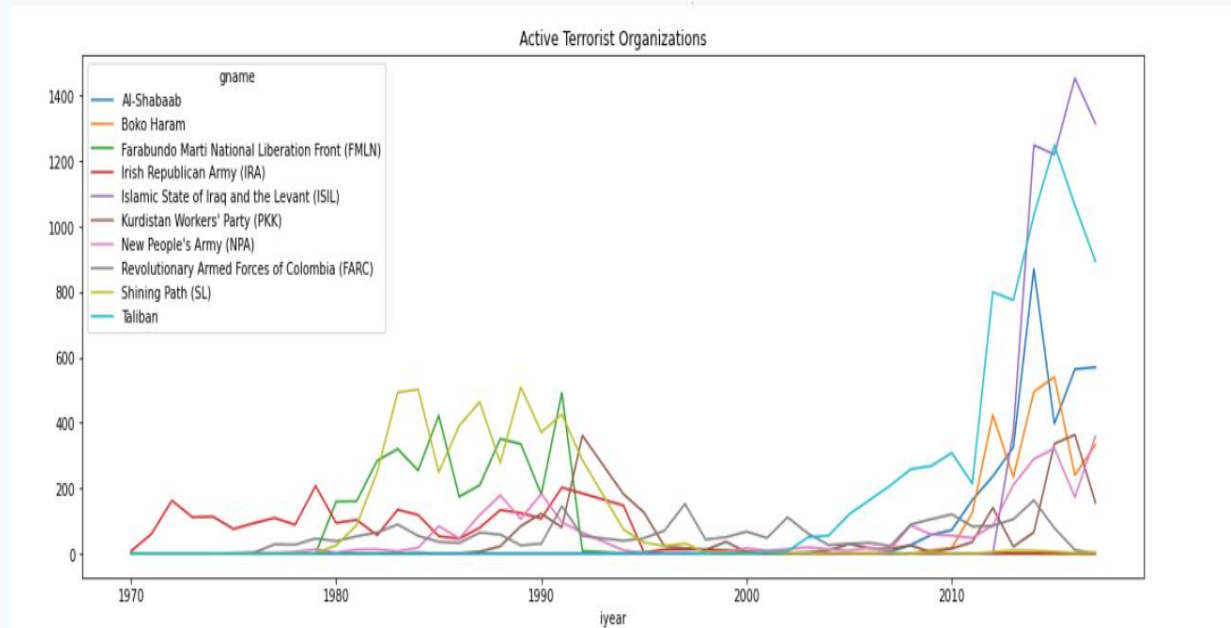
At the same time in Afghanistan Taliban emerged as the major terrorist group.

Top 10 Terrorist Organisation with Highest Terror Attacks

MAJOR TERRORIST GROUPS BEHIND ATTACKS

The rising trends of various terrorist organization from 1970 to 2014 are picturized using a trend plot

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Active Terrorist Organizations

gname
- Al-Shabaab
- Boko Haram
- Farabundo Marti National Liberation Front (FMLN)
- Irish Republican Army (IRA)
- Islamic State of Iraq and the Levant (ISIL)
- Kurdistan Workers' Party (PKK)
- New People's Army (NPA)
- Revolutionary Armed Forces of Colombia (FARC)
- Shining Path (SL)
- Taliban

CHALLENGES

- Organizing and cleaning the dataset in google colab, adding matplotlib for pictorial representations.

- Hypothesis used for EDA.

- Selection of overall theme as our data consists of an important international issue which each country is facing.

- Visualizing the data, plotting the outcomes on world map.

CONCLUSION

1) This EDA project aimed to explore the terrorist activities happening over the   world from various aspects and identifying the major affected countries from terrorism.

2) The most common type of attack used for a long time is hostage attack.

3) The main growth of terrorism was from 2005-2014 and top most affected countries include Iraq, Afghanistan, Pakistan & India.

4) The most casualties were reported from Iraq.

5) In India there are two major groups active, Communist Party of India – Maoist (CPI-M) and Maoists.

6) A decline in terrorist activities is seen from 2014 till the year the data is available.

Q & A