Capstone Project

Global Terrorism Analysis

TEAM NAME: BETA_UP_YOUR_MIND

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Global Terrorism Analysis

Terrorism is defined as political violence in an asymmetrical conflict that is designed to induce terror and psychic fear (sometimes indiscriminate) through the violent victimization and destruction of noncombatant target.

The Global Terrorism Database(GTD) is a database including information on terrorist events around the world from 1970 through 2017. Unlike many other event databases, the GTD includes systematic data on domestic as well as international terrorist incidents that have occurred during this time period and now includes more than 181,000 cases.

In the following slides, we will understand on how the world has been affected by these terror attacks.

Raw Data

	eventid	iyear	imonth	iday	approxdate	extended	resolution	country	country_txt	region	...	addnotes	scite1	scite2	scite3	db
0	1.970000e+11	1970	7	2	NaN	0	NaN	58	Dominican Republic	2	...	NaN	NaN	NaN	NaN	
1	1.970000e+11	1970	0	0	NaN	0	NaN	130	Mexico	1	...	NaN	NaN	NaN	NaN	
2	1.970000e+11	1970	1	0	NaN	0	NaN	160	Philippines	5	...	NaN	NaN	NaN	NaN	
3	1.970000e+11	1970	1	0	NaN	0	NaN	78	Greece	8	...	NaN	NaN	NaN	NaN	
4	1.970000e+11	1970	1	0	NaN	0	NaN	101	Japan	4	...	NaN	NaN	NaN	NaN	

5 rows × 135 columns

Above picture depicts the raw data of Global Terror Attacks. The data has not been cleaned and contains unnecessary values.

Cleaned Data

	Year	Month	Day	Gang_Name	Nationality	Country	State	Region	City	Latitude	Longitude	Attack_Type	Weapon_Type	Main_Tar
0	1970	7	2	MANO-D	Dominican Republic	Dominican Republic	NaN	Central America & Caribbean	Santo Domingo	18.456792	-69.951164	Assassination	Unknown	Pri Citize Prop
1	1970	0	0	23rd of September Communist League	Belgium	Mexico	Federal	North America	Mexico city	19.371887	-99.086624	Hostage Taking (Kidnapping)	Unknown	Governr (Diplom
2	1970	1	0	Unknown	United States	Philippines	Tarlac	Southeast Asia	Unknown	15.478598	120.599741	Assassination	Unknown	Journalis M
3	1970	1	0	Unknown	United States	Greece	Attica	Western Europe	Athens	37.997490	23.762728	Bombing/Explosion	Explosives	Governr (Diplom
4	1970	1	0	Unknown	United States	Japan	Fukouka	East Asia	Fukouka	33.580412	130.396361	Facility/Infrastructure Attack	Incendiary	Governr (Diplom

Above picture depicts the cleaned data of Global Terror Attacks. The data has been cleaned and the column names have been modified.

OVERVIEW

1. Analysis based on attacks

- Top 10 Terrorist organization with most no. of attacks.
- Top terrorist organization and their favourite attack types.
- Type of attack mostly used by the terrorist organization.
- Top 10 most attacked targets.
- Yearly growth of terrorist attacks.

2. Analysis based on Killings

- Top 10 terrorist organization with highest kills.
- Location in which 50+ people were killed in the year which having the most terrorist attacks.
- Death analysis in both Country and Region wise.

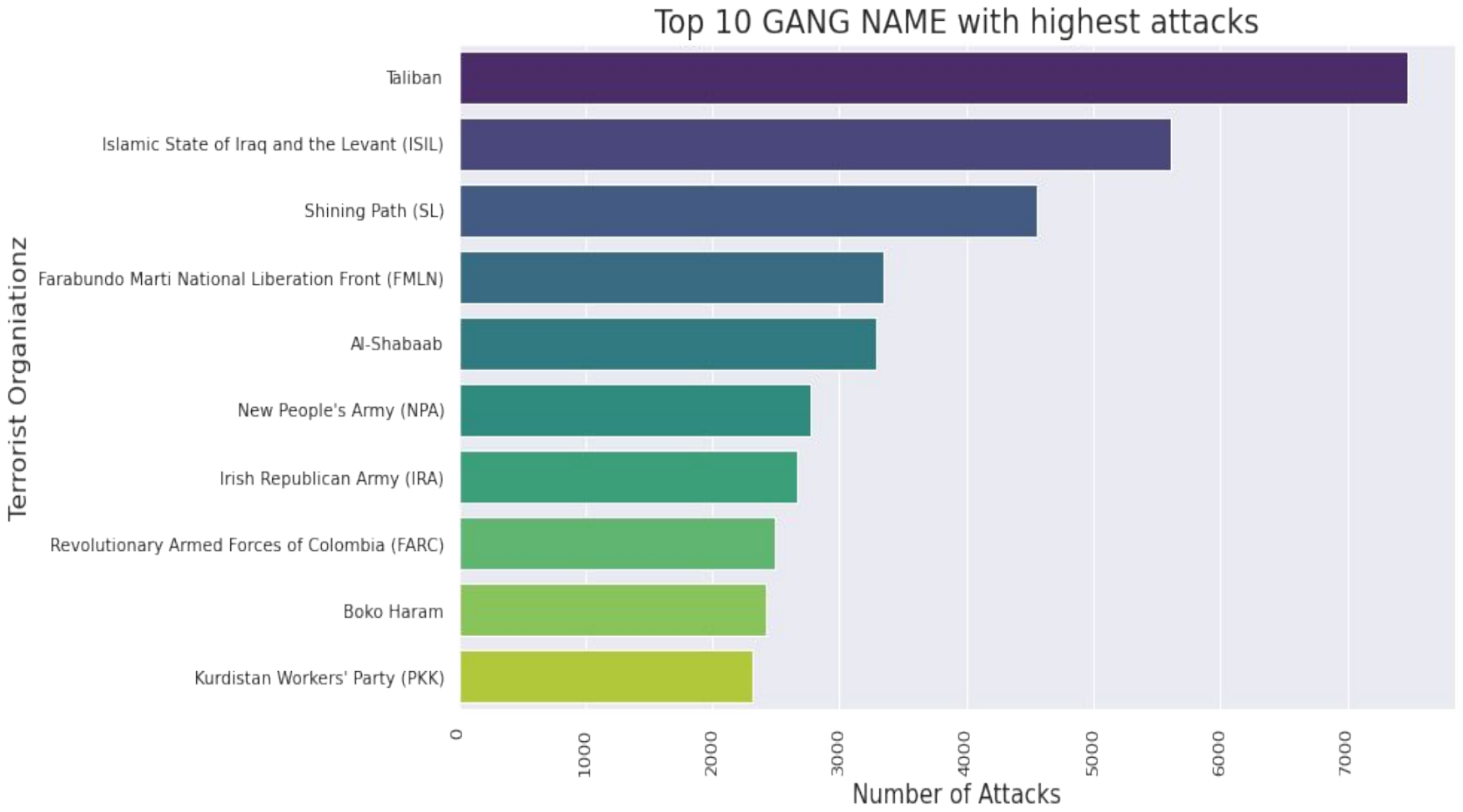
3. Analysis based on Country, region and State

- Top 10 most attacked countries.
- Most attacked region and state.

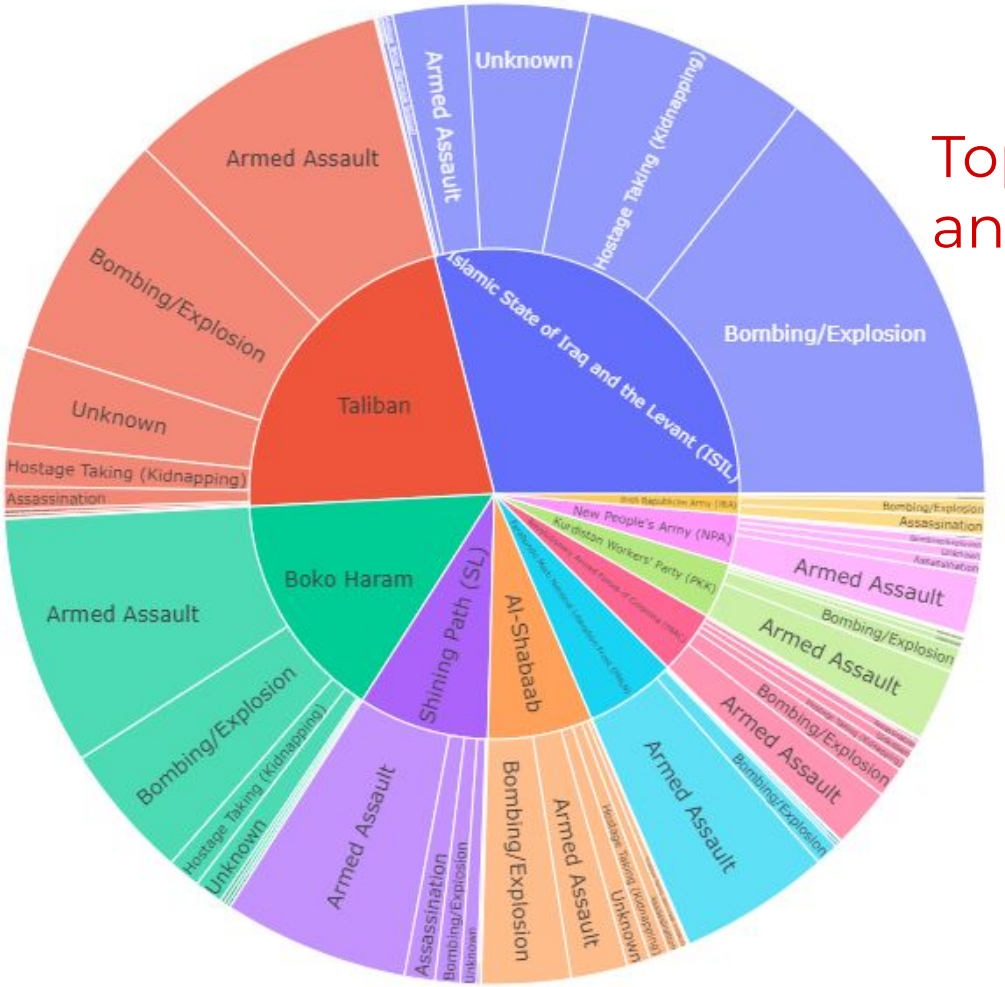
Data Summary

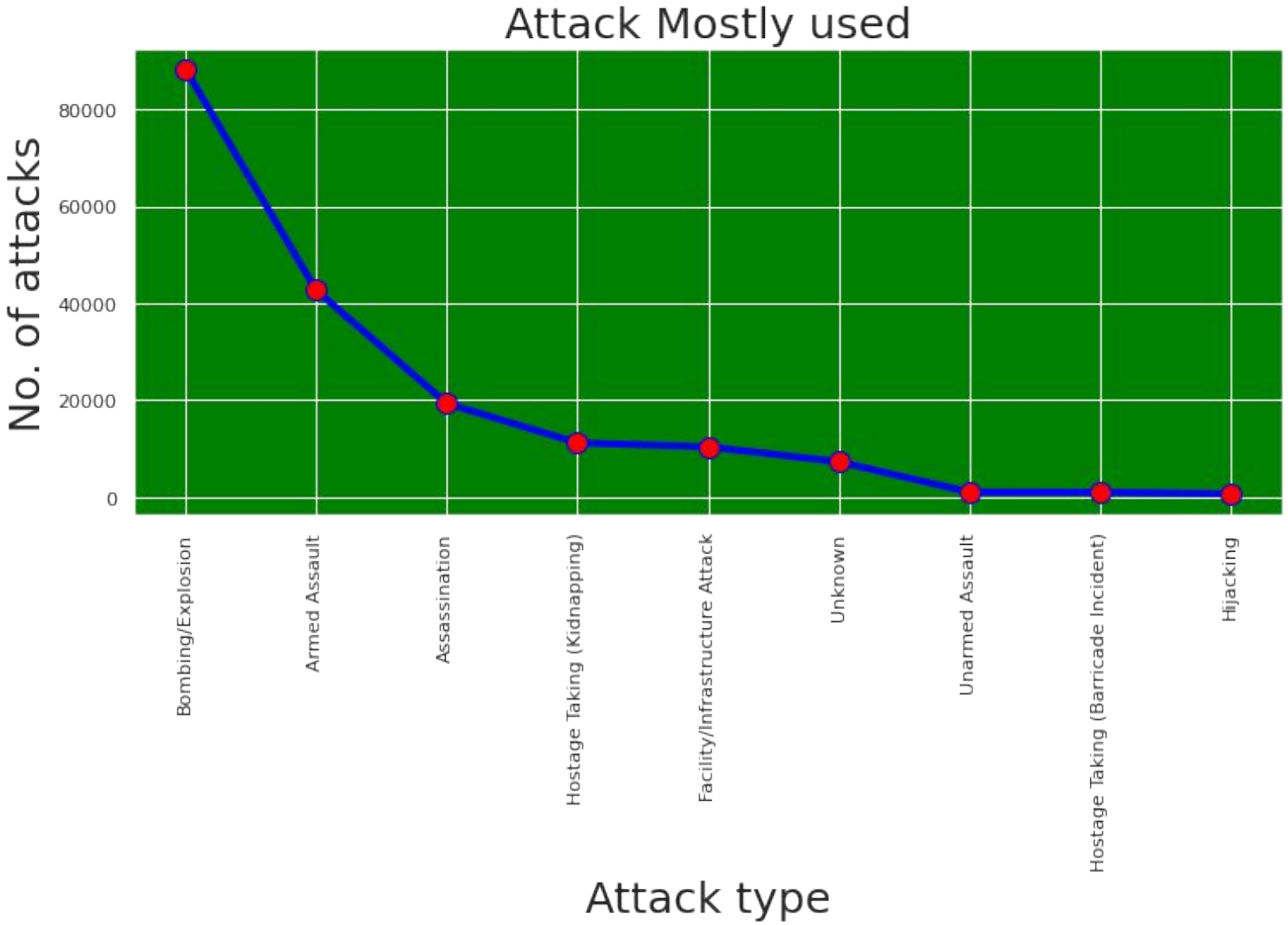
Year: Year of attack
Month: Month of attack
Day: Day on which attack happened
Country: Country in which attack happened
Gang_Name: Name of the gang that attacked
Main_Target: Type of people who have been targeted in the
Attack_Type: Type of attack used by the gang.
State: state in which attacked happened
Regions: the regions where attack has happened.
killed: Number of people killed in the attack.

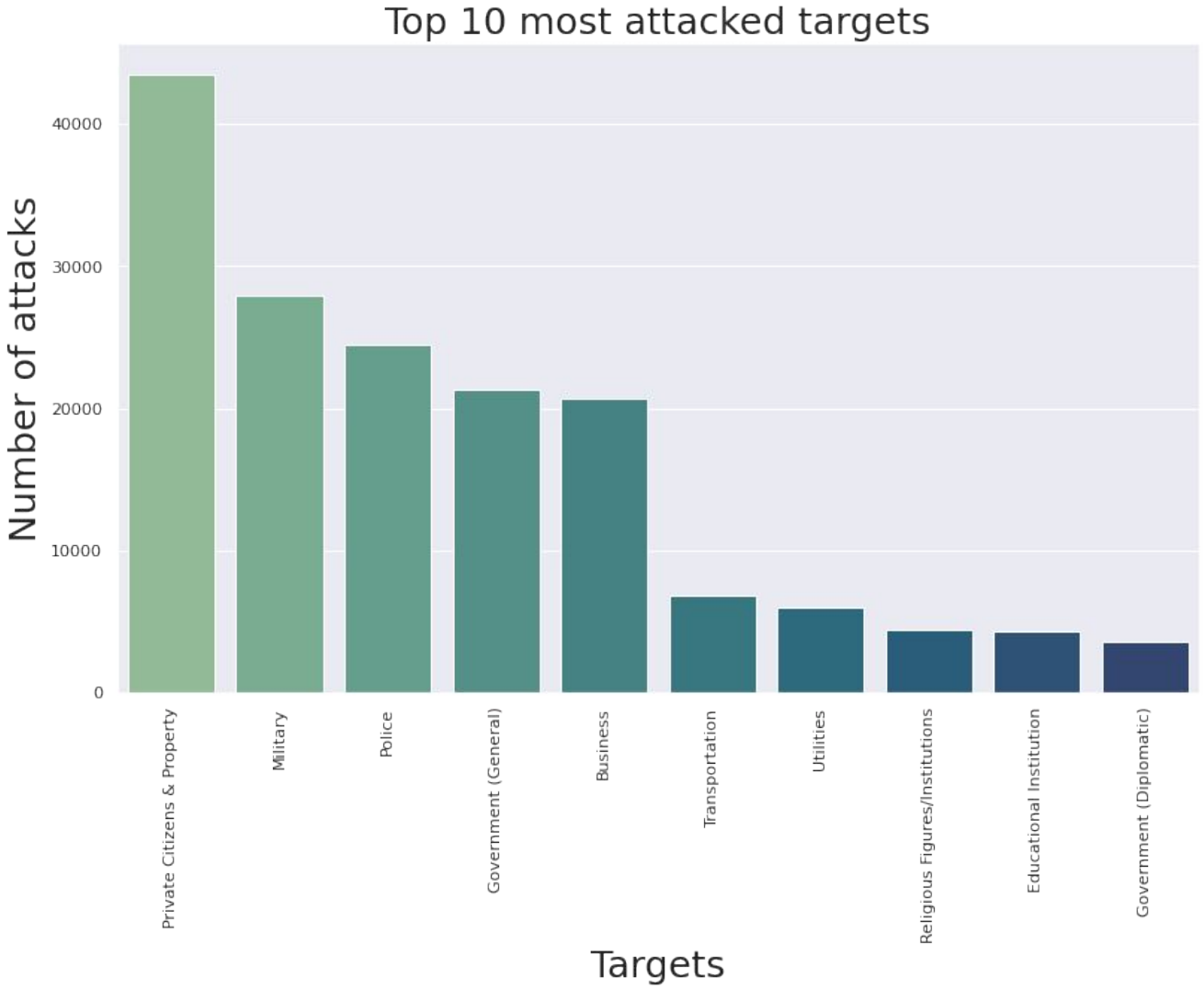
Analysis based on attacks

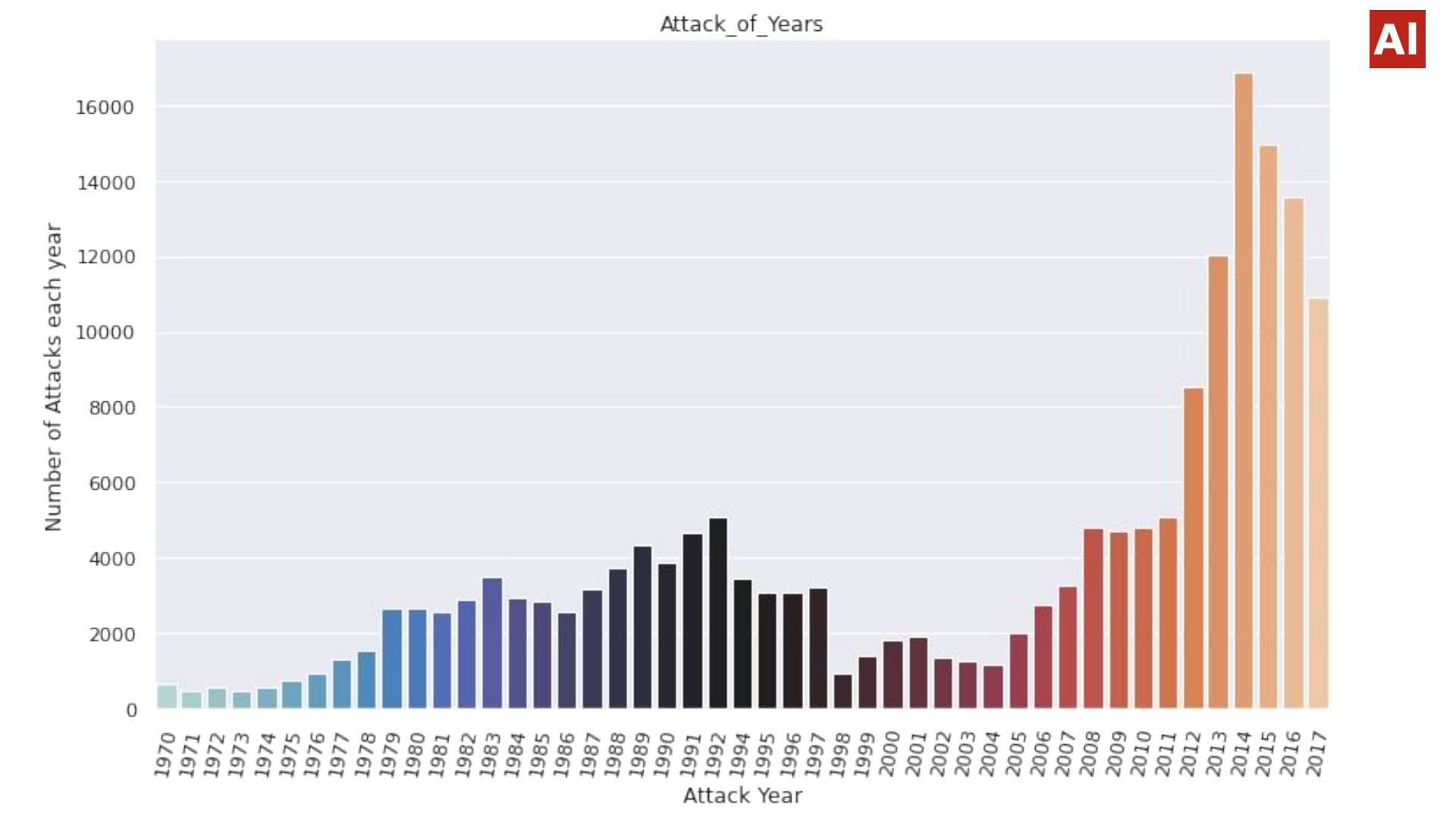


Top Terrorist Organizations and Attack Types

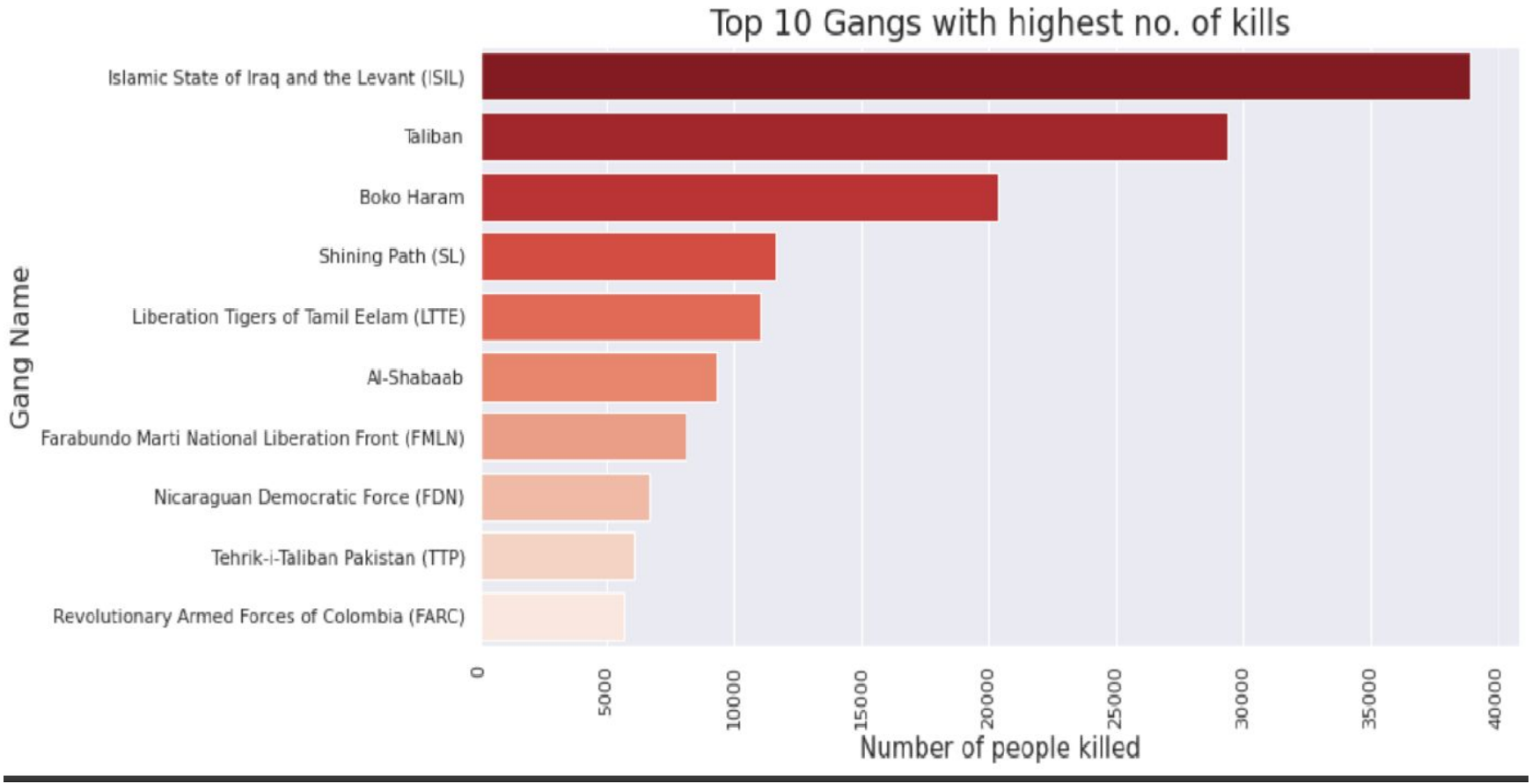



Attack Mostly used
No. of attacks
80000
60000
40000
20000
0
Bombing/Explosion
Armed Assault
Assassination
Hostage Taking (Kidnapping)
Facility/Infrastructure Attack
Unknown
Unarmed Assault
Hostage Taking (Barricade Incident)
Hijacking
Attack type

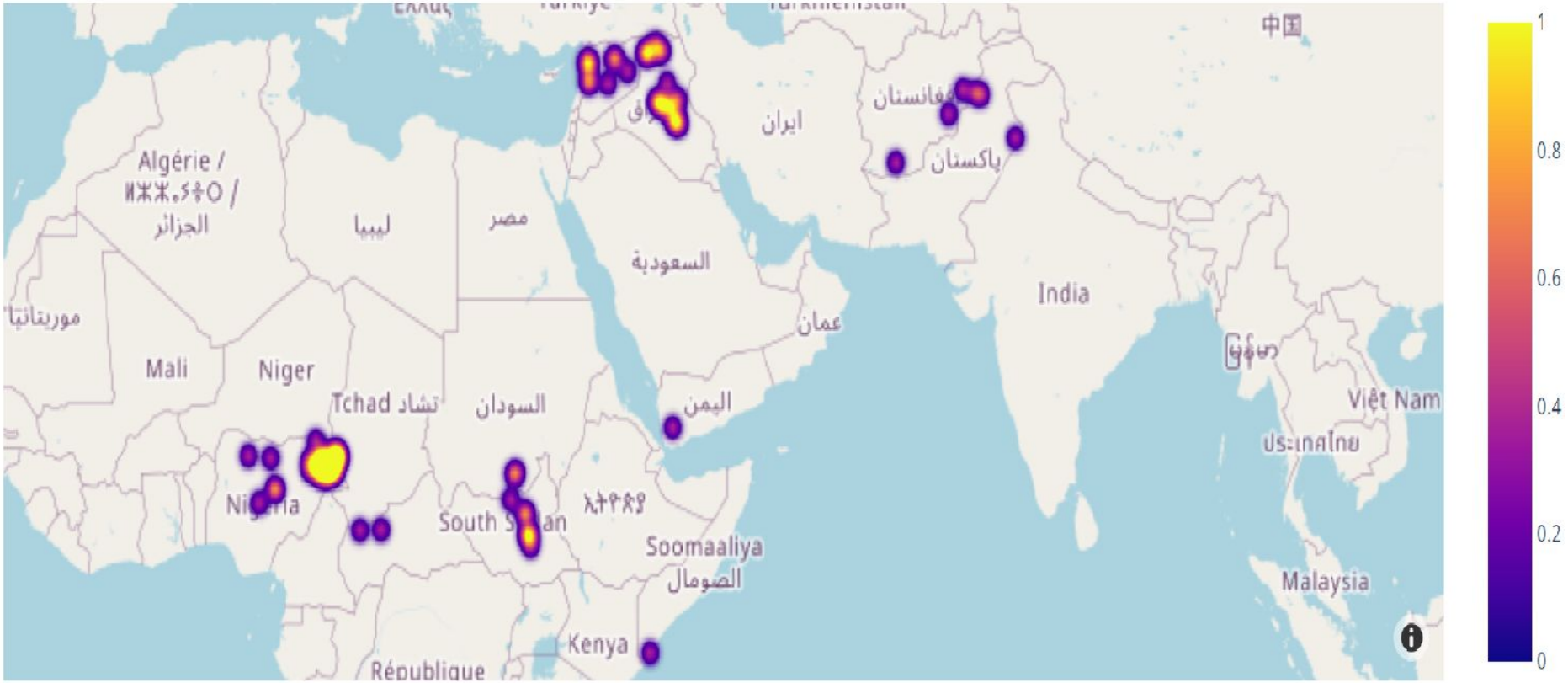

Top 10 most attacked targets
Number of attacks
40000
30000
20000
10000
0
Private Citizens & Property
Military
Police
Government (General)
Business
Transportation
Utilities
Religious Figures/Institutions
Educational Institution
Government (Diplomatic)
Targets

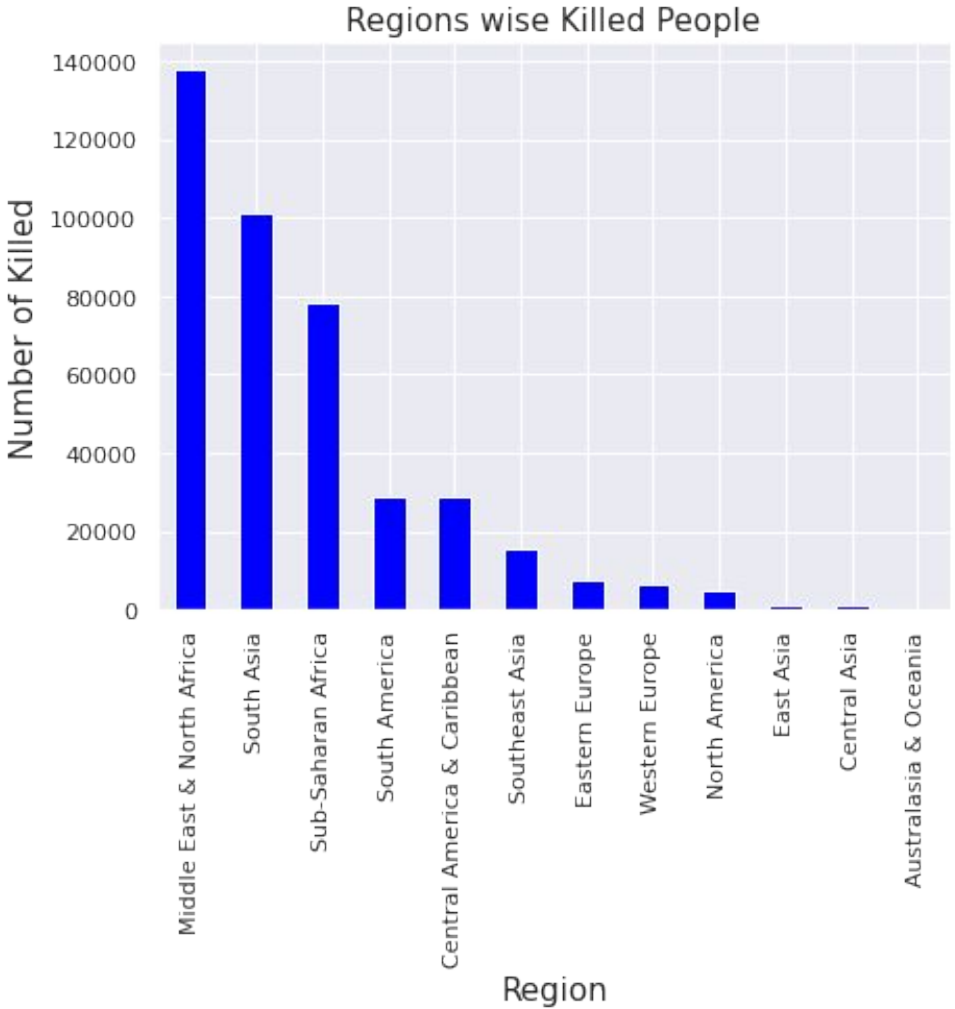

Attack_of_Years
Number of Attacks each year
0
2000
4000
6000
8000
10000
12000
14000
16000
1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017
Attack Year

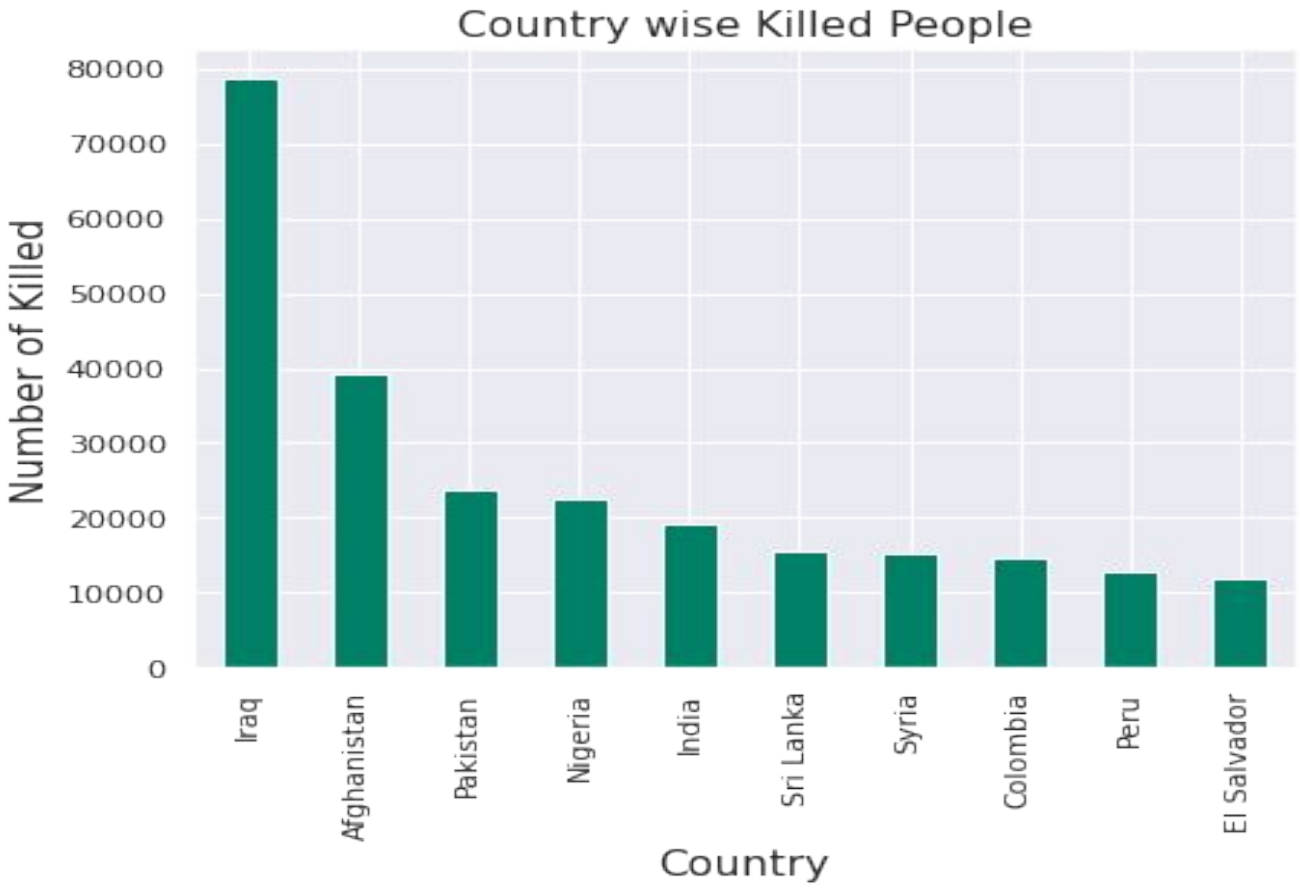
Analysis based on killings



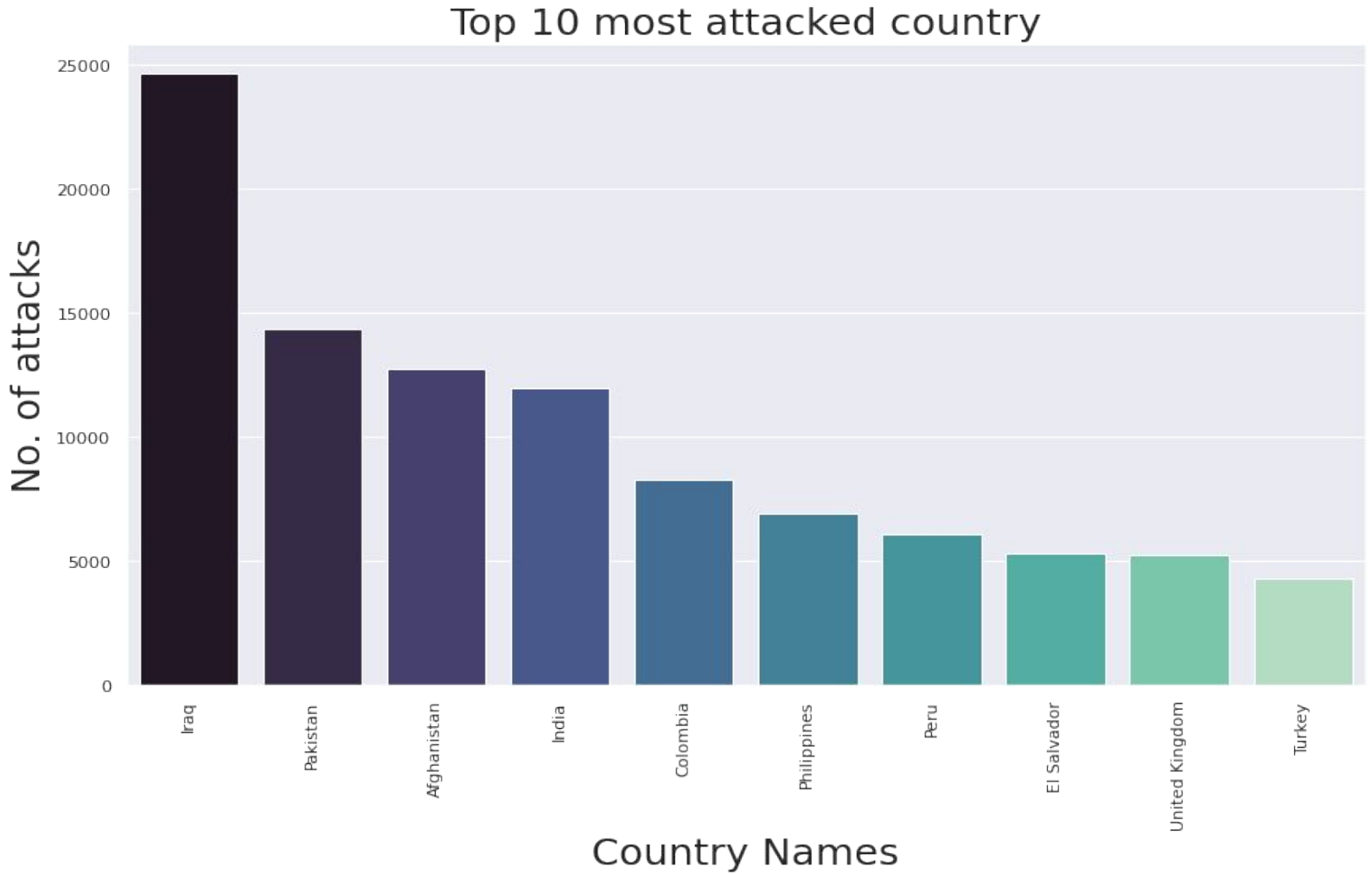
Location where Killings were More Than 50 People (2014)

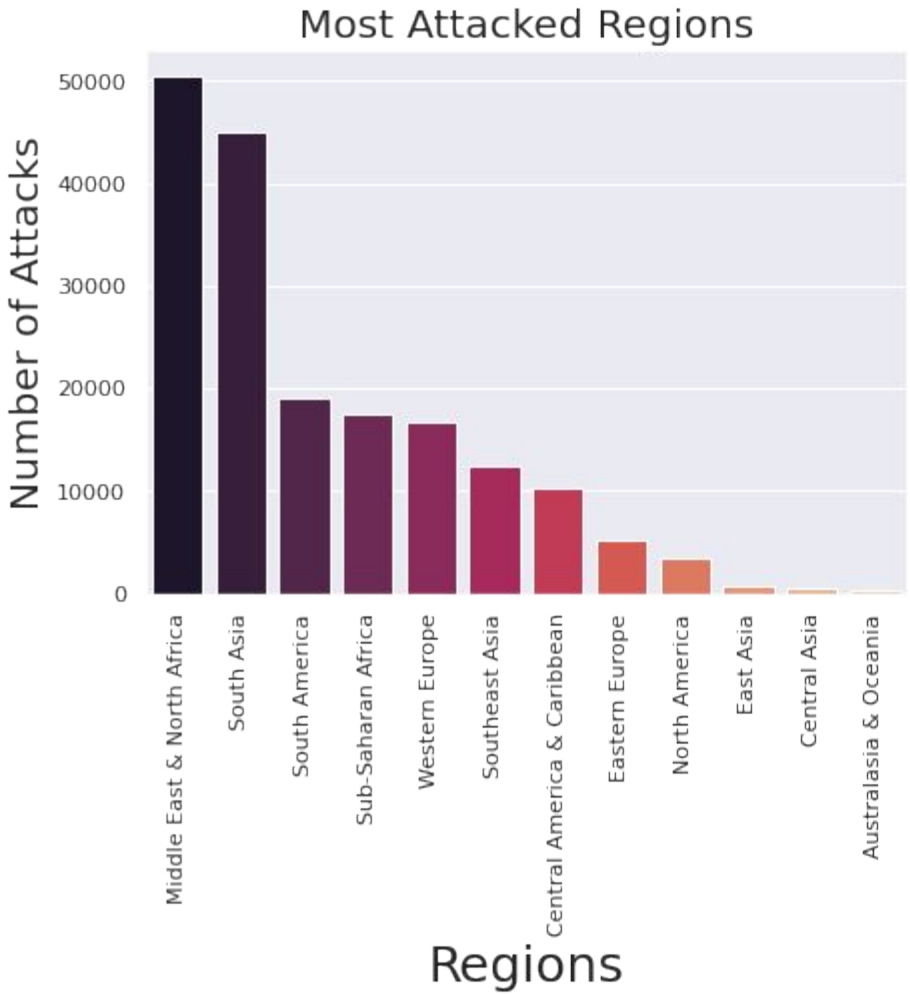


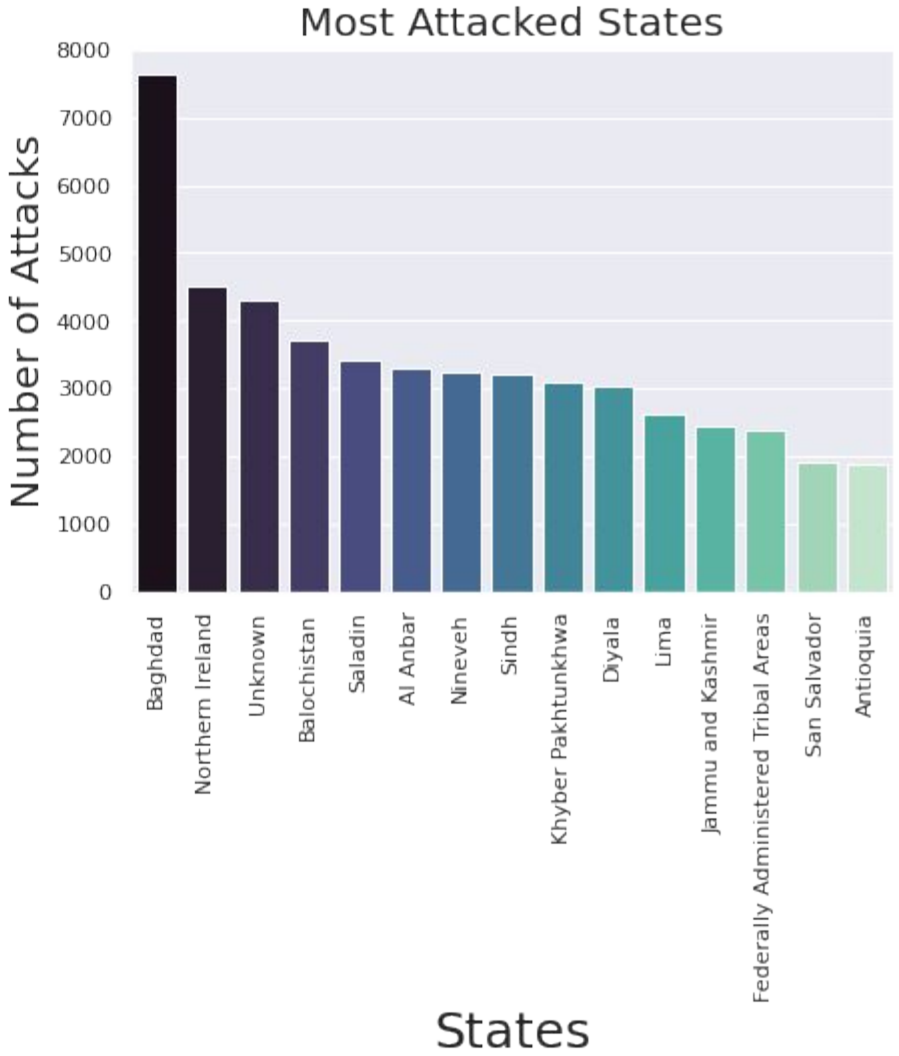

Regions wise Killed People
Number of Killed
140000
120000
100000
80000
60000
40000
20000
0
Middle East & North Africa
South Asia
Sub-Saharan Africa
South America
Central America & Caribbean
Southeast Asia
Eastern Europe
Western Europe
North America
East Asia
Central Asia
Australasia & Oceania
Region


Country wise Killed People
Number of Killed
80000
70000
60000
50000
40000
30000
20000
10000
0
Iraq
Afghanistan
Pakistan
Nigeria
India
Sri Lanka
Syria
Colombia
Peru
El Salvador
Country

Analysis based on country,region and state




Most Attacked Regions
Number of Attacks
50000
40000
30000
20000
10000
0
Middle East & North Africa
South Asia
South America
Sub-Saharan Africa
Western Europe
Southeast Asia
Central America & Caribbean
Eastern Europe
North America
East Asia
Central Asia
Australasia & Oceania
Regions


Most Attacked States
Number of Attacks
8000
7000
6000
5000
4000
3000
2000
1000
0
Baghdad
Northern Ireland
Unknown
Balochistan
Saladin
Al Anbar
Nineveh
Sindh
Khyber Pakhtunkhwa
Diyala
Lima
Jammu and Kashmir
Federally Administered Tribal Areas
San Salvador
Antioquia
States

CONCLUSION

- "Taliban" is the most powerful, dangerous and the most active gang among all of the gangs, followed by "Islamic state of Iraq and the levant(ISIL)" and "shining path(SL)".
- "Islamic State of Iraq and the Levant (ISIL)" killed the highest number of people which is approximately 40k followed by "Taliban" and "Boko Haram" with an approximation of 30k & 20k respectively.
- 50% of the attacks have occurred because of Bombing/Explosion and 10-20% occurred because of Armed Assault & Remaining other are in between 0-6%.
- After 2011 we can observe that there is a large growth recorded in terrorist attacks followed by 2014 which appears to witness a sudden growth in the terrorist attacks.
- “Iraq" is the country that has the highest number of people killed due to terrorist attacks, approximately 80k followed by "Afghanistan" & "Pakistan“.

- Among all the regions "Middle East & North Africa" has the most number of killed people approximately 1.4 Lakhs followed by "South-Asia" & "Sub-Saharan Africa".
- The most targeted attacks are on "Private Citizens & Property" which is approximately 25% and 10-20% is the target on "Military", "Police", "Government", "Business".
- Most number of attacks have happened in the "Baghdad" followed by “Northern Ireland“ and other many other states.

THANK YOU

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