



PROJECT ON WORLD TERRORISM ANALYSIS IN POWER BI

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INTRODUCTION

- **Overview:**

- This project aims to analyze global terrorism trends using the Global Terrorism Database.
- Understanding these patterns is crucial for developing effective counter-terrorism strategies.

- **Data Source:**

- Global Terrorism Database (GTD), maintained by the National Consortium for the Study of Terrorism and Responses to Terrorism (START).

OBJECTIVES

- **Main Objectives:**

- Identify the most targeted facilities by terrorist groups.
- Analyze trends over time and geographical distribution.
- Understand the methods and impact of terrorist attacks.
- Identifying the most deadly terrorist groups
- Understand types of weapons mostly used by Terrorist groups
- Identifying countries and regions prone to terrorist attacks

DATA LOADING

- Loaded Terrorism Dataset which was in CSV format.

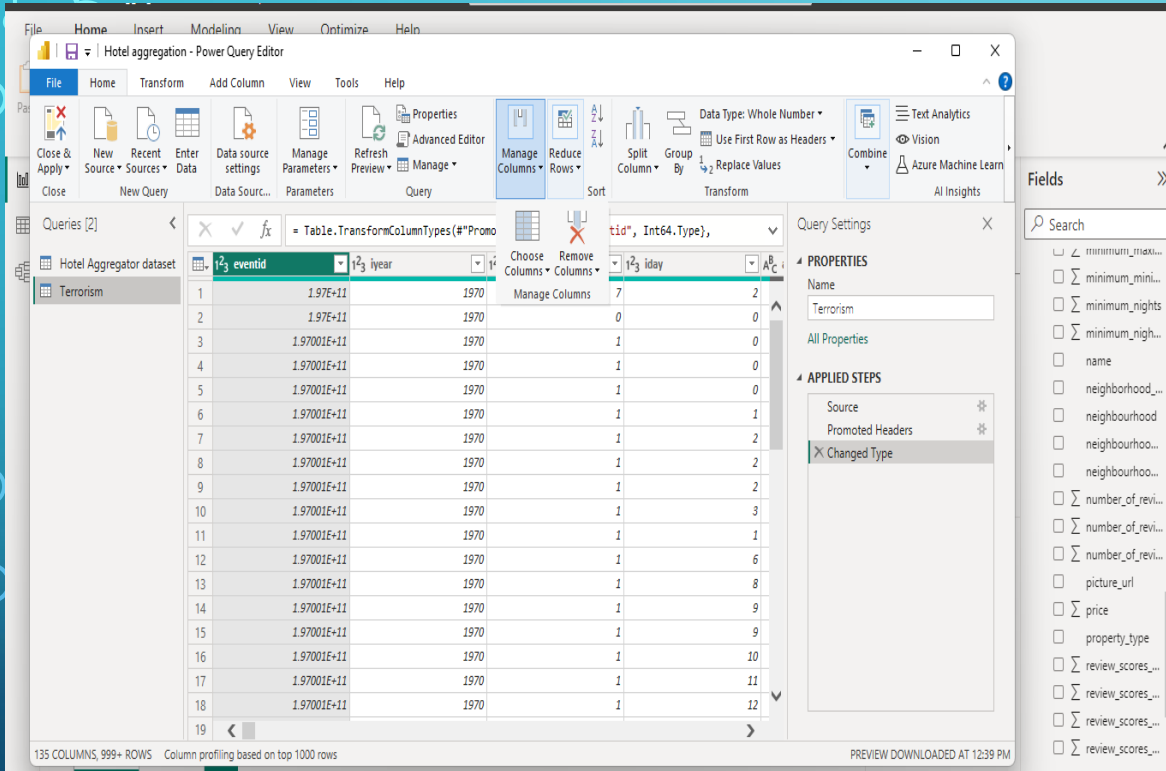
Terrorism.csv

File Origin: 1252: Western European (Windows) | Delimiter: Comma | Data Type Detection: Based on first 200 rows

eventid	iyear	imonth	iday	approxdate	extended	resolution	country	country_txt	region	region_txt
1.97E+11	1970	7	2		0	null	58	Dominican Republic	2	Central America & Ca
1.97E+11	1970	0	0		0	null	130	Mexico	1	North America
1.97001E+11	1970	1	0		0	null	160	Philippines	5	Southeast Asia
1.97001E+11	1970	1	0		0	null	78	Greece	8	Western Europe
1.97001E+11	1970	1	0		0	null	101	Japan	4	East Asia
1.97001E+11	1970	1	1		0	null	217	United States	1	North America
1.97001E+11	1970	1	2		0	null	218	Uruguay	3	South America
1.97001E+11	1970	1	2		0	null	217	United States	1	North America
1.97001E+11	1970	1	2		0	null	217	United States	1	North America
1.97001E+11	1970	1	3		0	null	217	United States	1	North America
1.97001E+11	1970	1	1		0	null	217	United States	1	North America
1.97001E+11	1970	1	6		0	null	217	United States	1	North America
1.97001E+11	1970	1	8		0	null	98	Italy	8	Western Europe
1.97001E+11	1970	1	9		0	null	217	United States	1	North America
1.97001E+11	1970	1	9		0	null	217	United States	1	North America
1.97001E+11	1970	1	10		0	null	499	East Germany (GDR)	9	Eastern Europe
1.97001E+11	1970	1	11		0	null	65	Ethiopia	11	Sub-Saharan Africa
1.97001E+11	1970	1	12		0	null	217	United States	1	North America
1.97001E+11	1970	1	12		0	null	217	United States	1	North America
1.97001E+11	1970	1	13		0	null	217	United States	1	North America

Extract Table Using Examples | Load | Transform Data | Cancel

DATA PREPARATION AND TRANSFORMATION

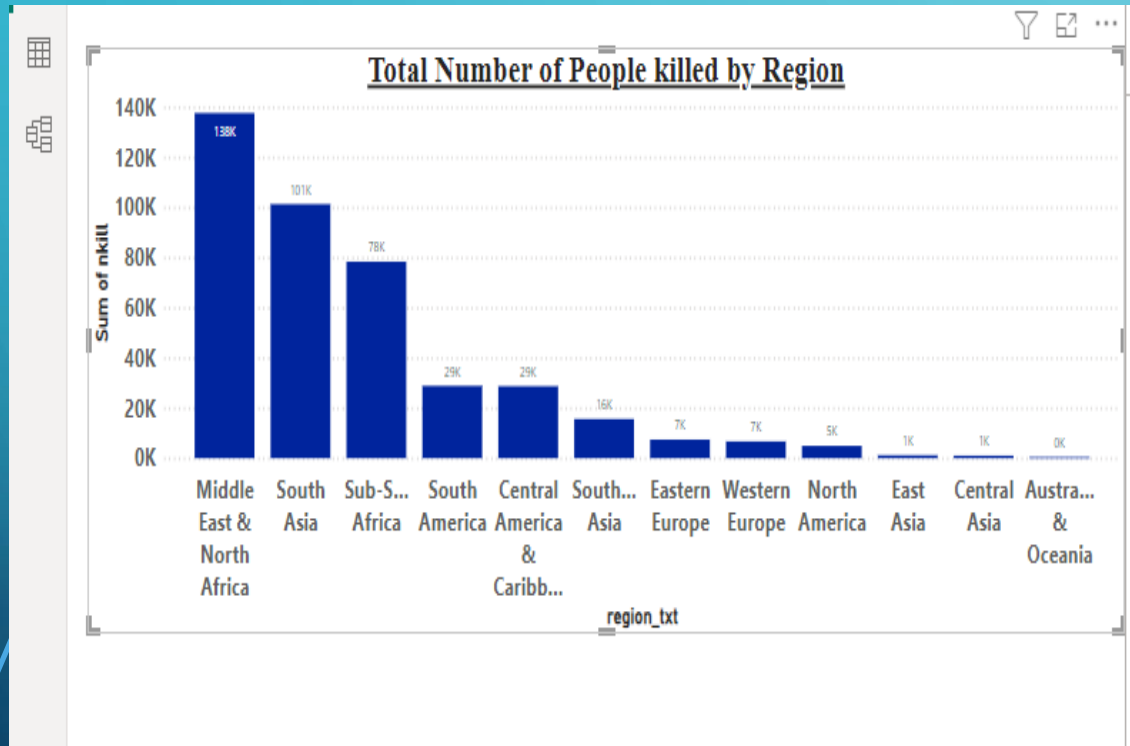


The screenshot displays the Microsoft Power Query Editor window. The 'Query Settings' pane on the right shows the 'Applied Steps' list, which includes 'Source', 'Promoted Headers', and 'Changed Type'. The main data preview area shows a table with 19 rows and 4 columns. The columns are 'eventid', 'year', 'tid', and 'iday'. The data is filtered to show rows where 'year' is 1970. The status bar at the bottom indicates '135 COLUMNS, 999+ ROWS' and 'Column profiling based on top 1000 rows'.

eventid	year	tid	iday
1	1970	7	2
2	1970	0	0
3	1970	1	0
4	1970	1	0
5	1970	1	0
6	1970	1	1
7	1970	1	2
8	1970	1	2
9	1970	1	2
10	1970	1	3
11	1970	1	1
12	1970	1	6
13	1970	1	8
14	1970	1	9
15	1970	1	9
16	1970	1	10
17	1970	1	11
18	1970	1	12
19	1970	1	12

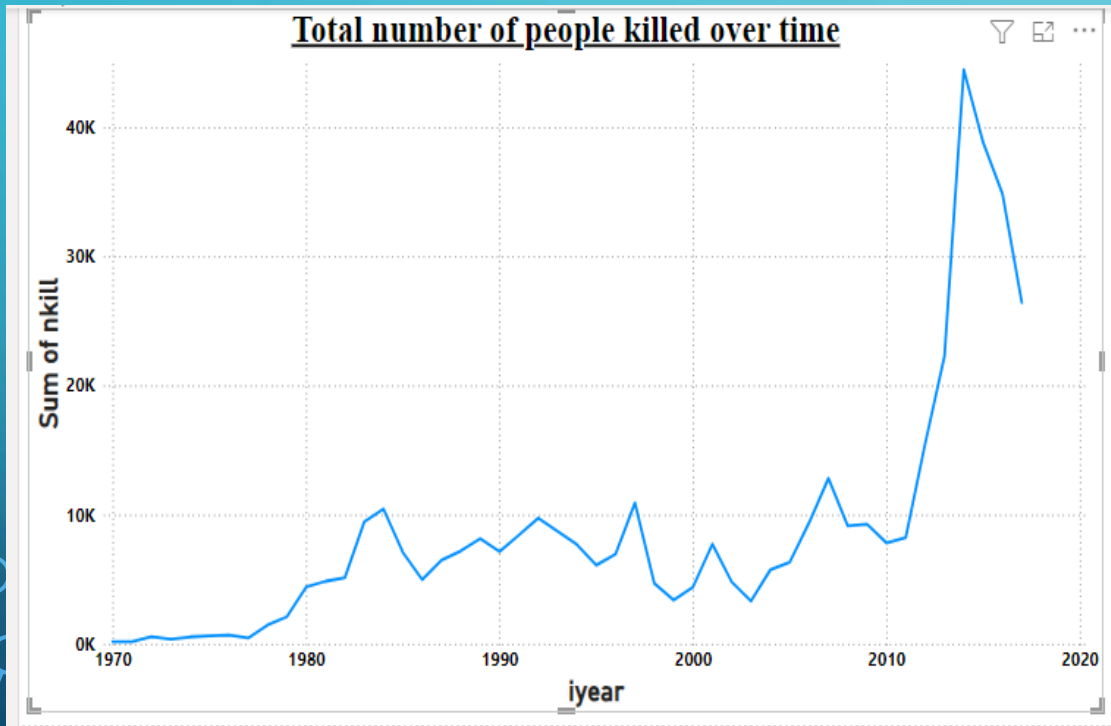
- Removed unnecessary columns and duplicated entries.
- Replaced Categorical columns with missing values by 'Unknown'.
- Checked data types for each column, ensuring correct data type.

DEATHS ANALYSIS BY REGIONS



- Stacked column chart was chosen to represent total deaths by Region.
- Middle East and North Africa account for 138k deaths followed by South Asia going on as represented from 1986 to 2017
- This indicates that these regions are prone to terrorist attacks and lack sophisticated deterrence to terrorist attacks.

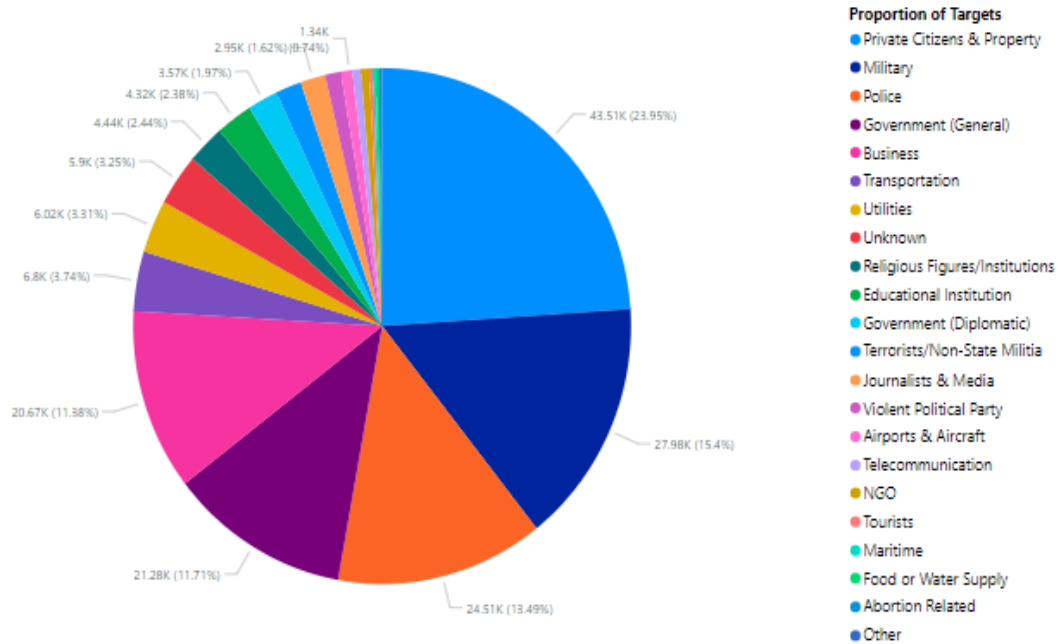
DEATHS ANALYSIS OVER TIME



- Line chart was chosen to trace total deaths over time.
- From 1970 to 2010, there was gradual increase in the total number of deaths in the world.
- In 2014 there was a sharp increase in the number of terrorist groups.

ANALYSIS OF TARGETED FACILITIES

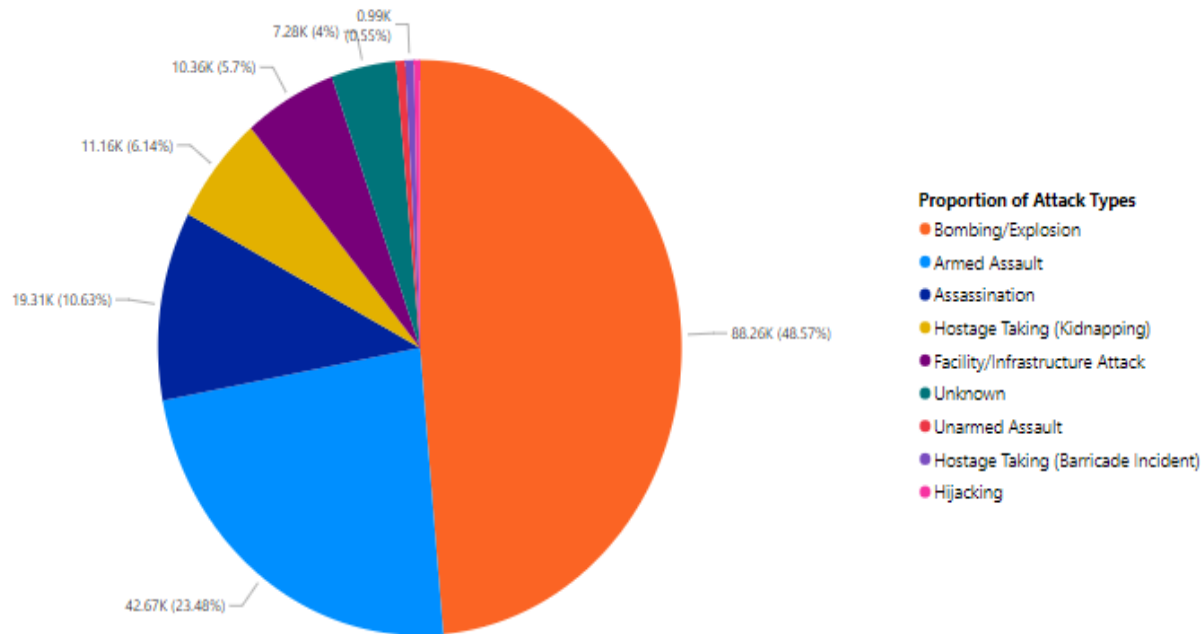
Proportion of most targeted facilities



- I chose Pie Chart to represent the proportion of targeted facilities by terrorist groups.
- From the chart, Private Citizens and Property are the most targeted facilities accounting for 23.95%, followed by Military Facilities accounting for 15.4 %, followed by Police Facilities accounting for 13.49% going down the rank.

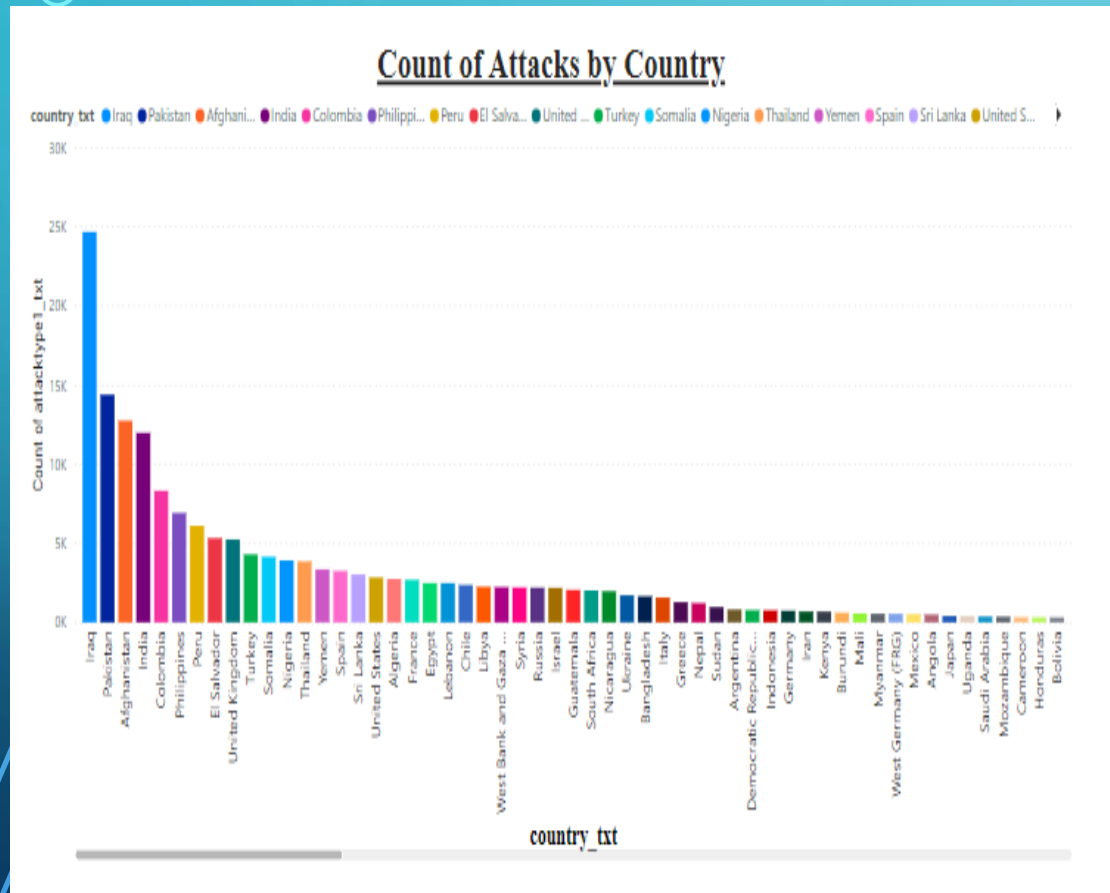
ANALYSIS OF ATTACK TYPES

Proportion of Attack Types



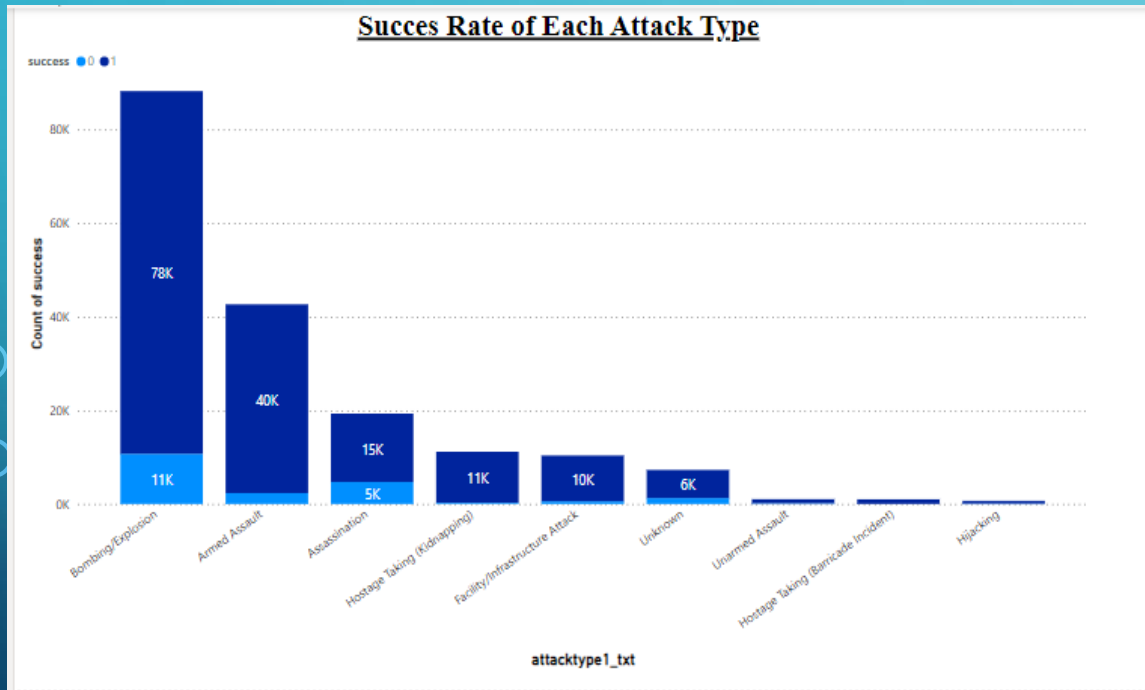
- Pie Chart was chosen to represent the proportion of Attack Types.
- The most type of attack in world terrorism is Bombing accounting for almost 50%, followed by Armed Assault account for 24% of the overall attack types.

ANALYSIS OF ATTACKS BY COUNTRY



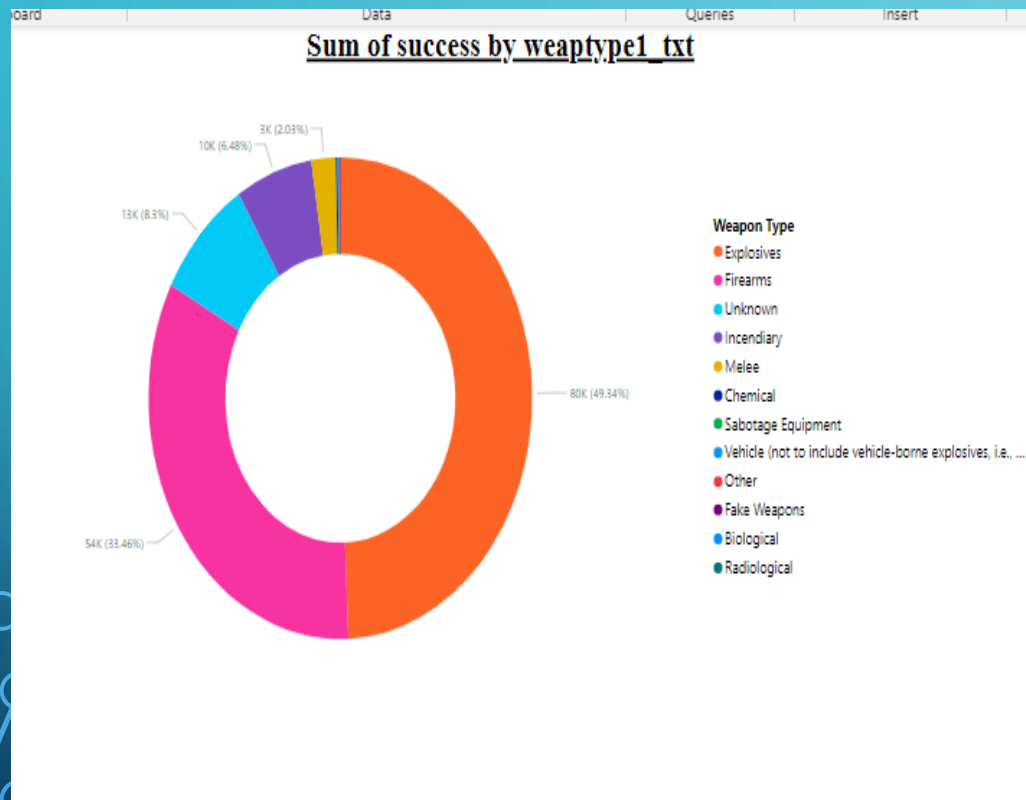
- Stacked column chart was chosen to show total number of attacks by each country.
- Iran followed by Pakistan has the most number of attacks indicating that they're prone to terrorist attacks.
- This also indicate that the countries need to improve their security services to curb deadly terrorist attacks.

ANALYSIS OF SUCCESS RATE PER ATTACK TYPE



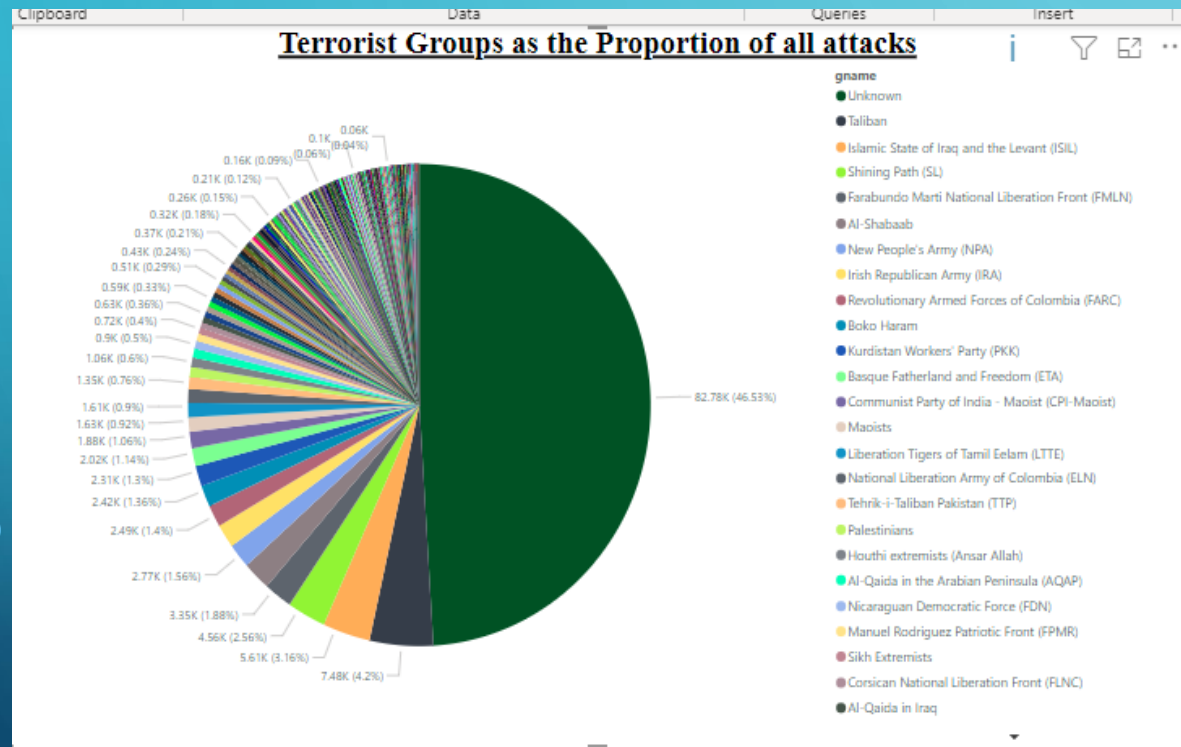
- Stacked column chart was used to show the success rate of each type of attack.
- From the chart, Hostage taking(Kidnapping) has the highest success rate of almost 100%
- This indicate that there's serious need to develop solutions to counter Hostage taking especially in countries like Iraq and Pakistan with highest numbers of attacks.

ANALYSIS OF SUCCESSFUL ATTACKS BY WEAPON TYPE



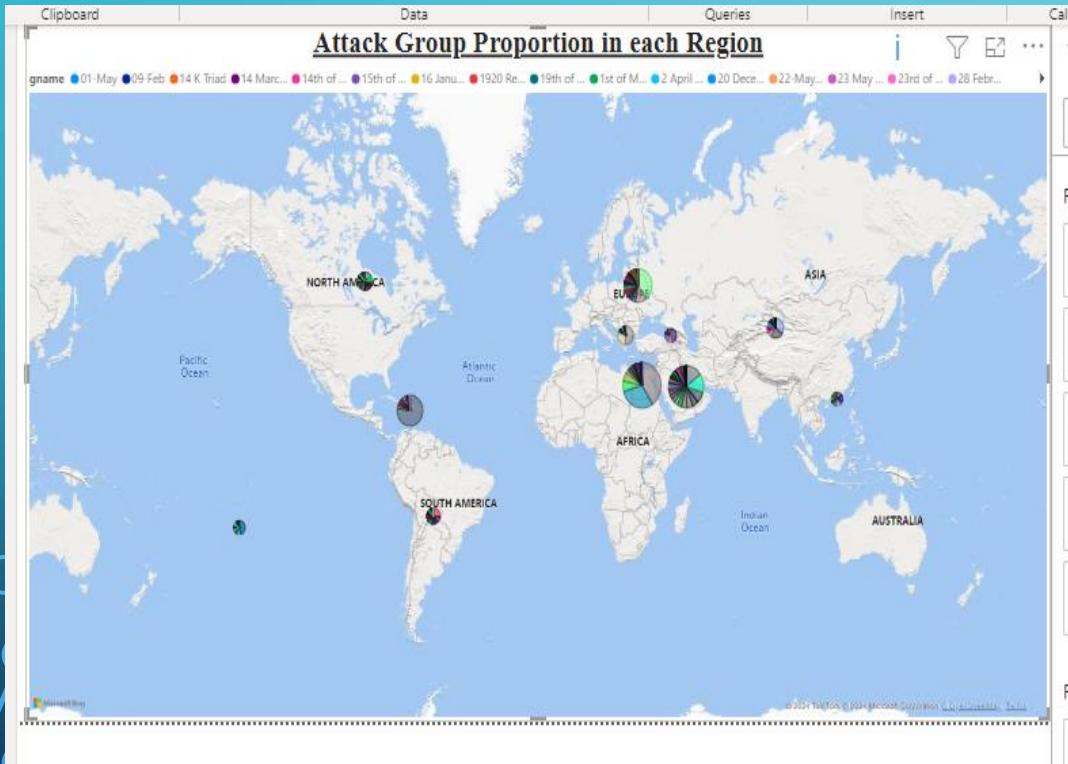
- Pie Chart was chosen to analyze the proportion of successful attacks by weapon type.
- Explosives has the highest success rate accounting for almost 50% of the successful attacks followed by firearms and so forth.

ANALYSIS OF TERRORIST ATTACK GROUPS.



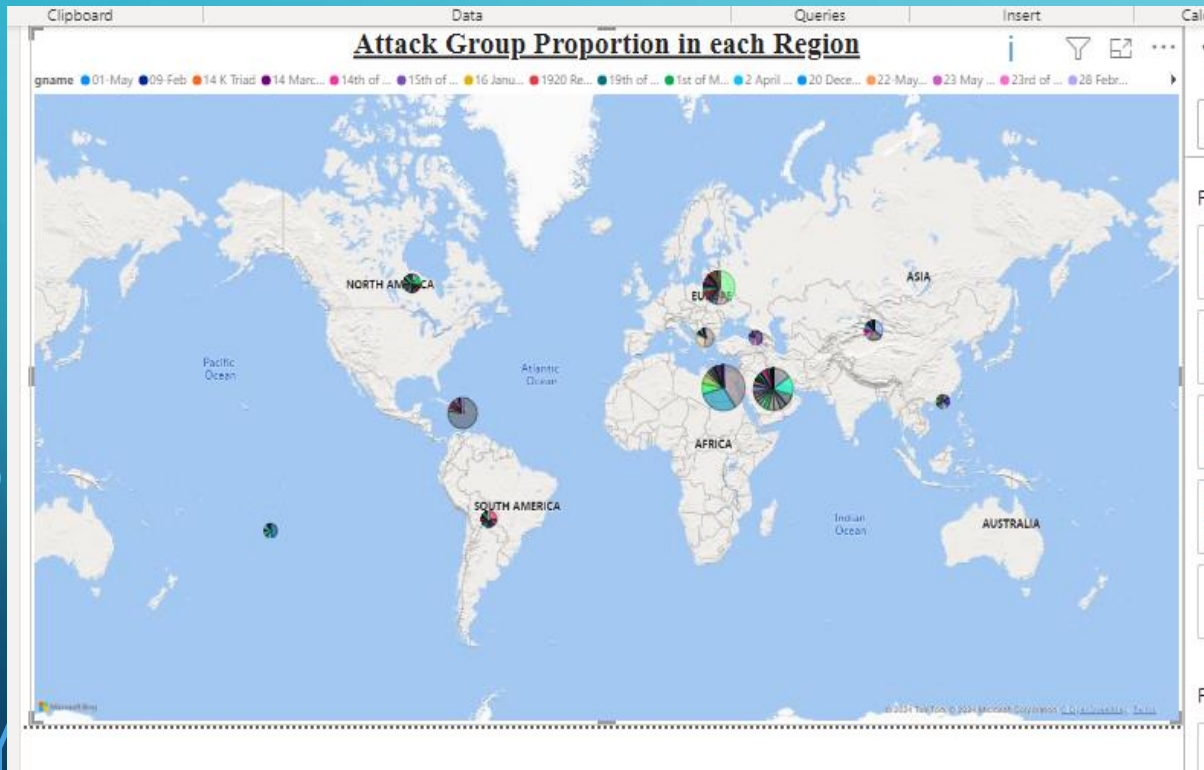
- The most terrorist attacks are carried out by Unknown attack groups accounting for almost 50% of total attacks followed by Taliban, Islamic State of Iraq and the Levant, Shining Path going down the list.

ANALYSIS OF WHICH GROUP IS MOST ACTIVE IN WHICH REGION



- I used a Geospatial Map to show the proportion of each terrorist group in different regions across the world.
- In Sub-Saharan Africa, the most active group is Al-Shabaab accounting for 42% of all the terrorist attacks followed by Boko Haram with 32%.
- This indicates that Al-Shabaab and Boko Haram are the most active terrorist groups in Sub-Saharan Africa all constituting 74% of the total terrorist activities.

CONT.. OF TERRORIST GROUPS



- In the Middle East and North Africa, Houthi Extremist is the most active terrorist group constituting 17% of the total terrorist activities, followed by Al Qaida with 14%.
- In Western Europe, Basque Fatherland and Freedom is the most active group with 44% of the total terrorist attacks, followed by Corsican Liberation Front.

CONCLUSION

Summary of Key Findings:

- Government and transportation facilities are primary targets of terrorist groups.
- Bombings are the predominant method, with severe impacts on civilian populations.
- The most used and successful weapon types are explosives.
- Europe and North America have managed to minimize terrorist attacks and total deaths due to terrorism.

Implications:

- Insights can inform policy and security measures.
- Important for strategic planning and resource allocation.

RECOMMENDATIONS

- **Actionable Recommendations:**

- Enhance security at high-risk facilities.
- Increase international cooperation in intelligence sharing to combat terrorist attacks.
- Invest in community resilience programs to mitigate impacts of terrorism.

- **Future Research:**

- Deeper analysis of socio-economic factors influencing terrorism.
- Study the effectiveness of counter-terrorism measures over time.

REFERENCE AND ACKNOWLEDGEMENTS

- **References:**

- Global Terrorism Database (GTD)
- National Consortium for the Study of Terrorism and Responses to Terrorism (START)

- **Acknowledgements:**

- Thanks to mentors, colleagues, and data providers.