Task #: Exploratory Data Analysis on Global Terrorism Data

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This are of the analysis is to:

1. Create a dell dashboard presentation by analyzing the dataset crime up with mitigation strategies.
2. Act as a defence analyst and try to find the thematic areas of terrorism.
3. Provide the information in an easily digestable format.

Introduction

Terrorism is the use of internal violence to instill panic or dread, usually with the goal of achieving political or religious objectives. The term is most commonly applied to politically motivated violence perpetrated against civilians or during wartime (mostly civilians and neutral military personnel).

Terrorism criteria

Only acts that satisfies the following three criteria, define as an act of terrorism.

1 POLITICAL, ECONOMIC, RELIGIOUS, OR SOCIAL GOAL

The violent act must be aimed at achieving a political, economic, religious, or social goal. This criterion is not satisfied in those cases where the motive behind the violent act is purely personal revenge or profit, or where the perpetrator's circumstances will in no way influence his/her decision.

2 INTENTION TO COERCE, INTIMIDATE, OR PUBLICIZE TO LARGER AUDIENCE(S).

To satisfy this criterion there must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience (or audiences). This criterion is satisfied in those cases where it is clear that the act was meant to influence a larger audience than just the immediate victim(s) and perpetrator(s), and / or addressing the perpetrators or the particular audience of the target(s) (victim, weapons, or whatever.)

3 OUTSIDE INTERNATIONAL HUMANITARIAN LAW

To satisfy this criterion, the act must violate International Humanitarian Law, Geneva Law or targets non-combatants (i.e. the act must be outside the parameters permitted by international conventions as reflected in the Additional Protocol to the Geneva Conventions of 12 August 1949 and elsewhere).

Preliminary Tasks and Data Preparation

Importing required packages, loading the dataset and cleaning the dataset(if required).

```
! ( ) ls data/*
```

Exploratory Analysis

Questions and Observations:

1. Amount and successful rate of attacks during recent years
2. Success Rates per Region and the Regionwise Attack Trends
3. Which weapons are being used to carry out these attacks?
4. Which attack types are common?
5. What weapons are being used to carry out these attacks?
6. Which are the most popular targets of terrorist attacks?
7. Spread of terrorist attacks throughout the world and time
8. Most affected cities and countries of terrorist attacks.
9. Most Popular Weapons of Terrorist Attacks
10. Hotbeds of terrorism over time

1) Trend in terrorist activities and Success Rate of attacks during recent years

- Calculating / gathering the relevant data.

```
Data Loaded
```

- Plotting the information in a bar chart.

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Show Code
```

Observations:

- The number of terrorist attacks have seen an exponential growth in the recent years.
- Although the number of the attacks seem to increasing, there has not been significant change in the success rate of the attacks being carried out.

2) Success Rates per Region and the Regionwise Attack Trends

- Calculating / gathering the relevant data.

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Data Loaded
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- Calculating the number of incidents per region w.r.t years

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Data Loaded
```

- Plotting the information.

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Show Code
```

Observations:

- The terrorist attacks in Central America, South America and Sub-Saharan Africa have the highest success rates.
- Middle East & North Africa, South Asia and Sub-Saharan Africa are the most affected regions.
- Even even post the 2011, Middle Eastern, African and South Asian nations have been exponential growth in attacks.

3) What are the most popular targets of terrorist attacks?

- Calculating / gathering the relevant data.

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Data Loaded
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- Plotting the information in a treemap.

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Most Popular Targets of Terrorist Attacks
Attacks Targeting Private Citizens & Property
Number of Attacks: 43,511
Attacks Targeting Military
Number of Attacks: 12,432
Attacks Targeting Police
Number of Attacks: 11,744
Attacks Targeting Government (General)
Number of Attacks: 10,769
Attacks Targeting Business
Number of Attacks: 9,974
Attacks Targeting Transportation
Number of Attacks: 7,276
Attacks Targeting Religious Figures/Institutions
Number of Attacks: 6,060
Attacks Targeting Educational Institutions
Number of Attacks: 5,062
Attacks Targeting Telecommunication
Number of Attacks: 3,770
Attacks Targeting Utilities
Number of Attacks: 3,732
Attacks Targeting Terrorists/Non-state militia
Number of Attacks: 2,854
Attacks Targeting Journalists & Media
Number of Attacks: 2,244
Attacks Targeting Maritime
Number of Attacks: 1,401
Attacks Targeting Airports & Aircraft
Number of Attacks: 1,053
Attacks Targeting Food/Water Supply
Number of Attacks: 1,000
Attacks Targeting Tourists
Number of Attacks: 1,000
Attacks Targeting Other
Number of Attacks: 1,000
Attacks Targeting Unknown
Number of Attacks: 1,000
Attacks Targeting Terrorism
Number of Attacks: 1,000
Attacks Targeting Nuclear Facilities
Number of Attacks: 1,000
Attacks Targeting Maritime Facilities
Number of Attacks: 1,000
Attacks Targeting Dignitaries
Number of Attacks: 1,000
Attacks Targeting Pipelines
Number of Attacks: 1,000
Attacks Targeting Mail Facilities
Number of Attacks: 1,000
Attacks Targeting Dams
Number of Attacks: 1,000
Attacks Targeting Other Infrastructure
Number of Attacks: 1,000
Attacks Targeting Other Critical