



# Tech Saksham

## Case Study Report

### Data Analytics with Power BI

## “Global Terrorism Dataset Analysis”

### “St. John's College”

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## ABSTRACT

The Global Terrorism Database (GTD) documents more than 200,000 international and domestic terrorist attacks that occurred worldwide since 1970. With details on various dimensions of each attack, the GTD familiarizes analysts, policymakers, scholars, and journalists with patterns of terrorism. The GTD defines terrorist attacks as: 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.

## INDEX

Sr. No.	Table of Contents	Page No.
1	Chapter 1: Introduction	4
2	Chapter 2: Services and Tools Required	6
3	Chapter 3: Project Architecture	7
4	Chapter 4: Modeling and Result	9
5	Conclusion	18
6	Future Scope	19
7	References	20
8	Links	21

## CHAPTER 1

### INTRODUCTION

#### 1.1 Problem Statement

Terrorism is the use of violence and intimidation, especially against civilians, in the pursuit of political, ideological, or religious goals. It is a tactic used by individuals or groups to achieve their objectives by creating fear and causing disruption.

Terrorism can take many forms, including bombings, assassinations, hijackings, and cyberattacks. It can be carried out by state actors or by non-state actors, such as terrorist organizations or extremist groups. The impact of terrorism is far-reaching, as it can cause physical harm, psychological trauma, and economic damage.

However, the problem of terrorism remains a significant global challenge, and efforts to address it must be ongoing and multifaceted

- The Middle East & North Africa suffered the most from terrorism.
- Taliban was the most successful terrorist group.
- The deadliest Weapon used was explosives.
- Bombing & explosions were the most preferred attack type.
- The highest individual target was 40.40k.
- The most assaults ever were committed in 2014, according to analysis in history.

#### 1.2 Proposed Solution

**Combating terrorism and criminality by winning the support of local populations, developing an integrated anti-terrorism approach by**

governments, regional organizations and the international community,  
**Bolstering judicial cooperation and the monitoring of illicit financial flows.**

Thousands of researchers, analysts, policymakers, and students use the GTD every day. In an effort to better understand the strengths and limitations of the GTD in practice, START would like to learn more about how the GTD informs your work. While we always welcome feedback on the database from users, we now invite you to let us know more about your responsibilities and how the GTD has been helpful to your efforts to better understand the causes and consequences of terrorism.

## 1.4 Features

- GTD Program Manager Dr. Erin Miller provides a **virtual lecture exploring the most recent terrorism trends found in the Global Terrorism Database (GTD).**
- After University of Maryland researchers began developing the GTD in 2002, Miller presents trends from the upcoming publication of new GTD data for 1970 to 2020.
- Topics include patterns of terrorism in the United States and around the world during the first year of the COVID-19 pandemic, developments in Afghanistan leading up to the 2021 collapse of the Afghan government, and the evolving geographic footprint of Islamic State-related terrorism.

## 1.5 Advantage

- START has released the first in a series of training modules designed to equip GTD users with the knowledge and tools to best leverage the database.

- This training module provides a general overview of the GTD, including the data collection process, uses of the GTD, and patterns of global terrorism.
- Participants will learn basic data handling and how to generate summary statistics from the GTD using PivotTables in Microsoft Excel.

## 1.6 Scope

- Time Period Covered: The GTD is a global data on terrorist incidents from 1970 to 2020, with annual updates planned for the future.
- Number of Cases: It contains a total of more than 200,000 terrorist attacks globally. Unlike many other databases, the GTD systematically records data on both domestic and international terrorist incidents.
- Attribution Recorded: For each terrorist incident, the GTD captures up to 120 separate attributes, including approximately 75 coded variables that can be used for statistical analysis. The attributes cover a wide range of sociological and situational factors related to each attack.
- Kata Visualization: The GTD provides visualization, such as heat maps, to showcase the geographic concentration and intensity of terrorist attacks worldwide. The fatality count is calculated based on the number of people killed or injured in each attack.

## CHAPTER 2

### SERVICES AND TOOLS REQUIRED

#### 2.1 Services Used

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- l'ke database assists i-á pla-á i-á g roí potc-á tial t'cíóíst attacks, c-á s"íi-á g timclQ ícsc"e opcíatio-á s, a-á d mi-á imizi-á g cas"altics.

Joint Co-ordination Efforts:

- The G7K states as a **solid and reliable** **effort** to collaborative co-ordination efforts across countries and regions.

BQ should be data and digital skills, and also work together to combat terrorism, track and share information and threats, and develop a global security.

## 2.2 Tools and Software used

Tools:

- 1) **Incidents:** While not exclusively associated with terrorism, incidents can be significant and deadly attacks and methods. Although the number of incidents is around 10% or attacks, the number of attacks is around 55% or fatalities. This statistic highlights the devastating impact of terrorism on the population.
- **Explosives:** Explosives, including bombs and missiles, constitute a common weapon in terrorism attacks. The number of attacks is around 2% or all attacks in 2022. While explosives cause significant damage, the number of fatalities is low compared to incidents.
- **Other Methods:** Beyond explosives and terrorism, incidents can include employment, assassination, kidnapping, biological agents, chemical substances, and information technology attacks. However, these methods match the lethality of terrorism.

Software Requirements:

- Exploitation Kata Analysis (EKA) is a terrorism dataset that most attacks fall into the categories of explosives and incidents<sup>1</sup>. These methods are often used to cause significant damage.

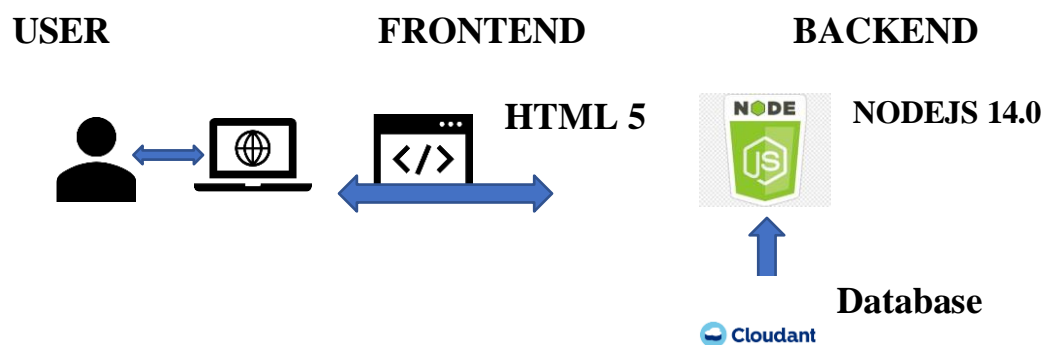


- A st" dQ spa→i→i→ig ri:c decades or global ckemical tcióí attacks ro"→d tkat ca"stic agc→ts wcíc "scd i→i a sig→irica→t poítio→i or attacks (25%). Explosi:c dc:iccs wcíc also "tilized (21%) to deli:cí tkesc ckemical agc→ts.
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- Remembcí tkat tkesc statistics ípíesc→t ícal-wóild c:c→ts a→d "→dcíscóic tke impoíta→cc or addícssi→ig tcióíism tkío" gk píc:c□ti:c meas"ícs a□d i□tcí□atio□al coopciatio□.

## CHAPTER 3

### PROJECT ARCHITECTURE

#### 3.1 Architecture



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It's the calm or global co-territorialism, a complex web or institution's and initiatives exists, spanning across the United Nations and beyond. Let's delve into this intricate architecture:

- United Nations (UN): The UN plays a pivotal role in global co-territorialism efforts. It collaborates with various specialized agencies, such as the International Atomic Energy Agency (IAEA), which focuses on combating global nuclear terrorism.
- Global Co-Territorialism Initiative (GCTI): This international platform brings together governments, experts, and organizations to share knowledge, develop best practices, and encourage cooperative territorialism.
- Global Initiative Initiative to Co-Territorialism (GIICI): In the digital age, combating online radicalization and extremist content is crucial. GIICI collaborates with tech companies to address this challenge.
- Architecture and Security Measures: Beyond institutions, architecture itself plays an unexpected role in co-territorialism. Well-designed public spaces, architects consider security measures to mitigate risks. For instance, the "gated" planning can encourage security without compromising aesthetics.

Urban Planning and Resilient Cities: Urban planning policies and architectural choices contribute to resilient cities. BQ creating spaces that balance security and openness, we can foster security while preserving the essence of public life.

## **CHAPTER 4**

### **MODELING AND RESULT**

## Manage relationship

Global terrorism is a multifaceted and complex challenge that has significant implications for international security worldwide. It encompasses a wide range of threats, actions, and actors. Let's delve into some key aspects:

Key Actors and Threats:

- **States:** Some states engage in terrorism through covert operations or direct attacks to achieve political goals.
- **Extremists:** Non-state actors, such as extremist groups, carry out terrorist acts.
- **Complex Conflicts:** Terrorism is intertwined with civil wars, insurgencies, and asymmetric warfare.
- **Religious Extremism:** Ideological, ethnic, and religious actors drive terrorism.
- **Global Reach:** The threat extends beyond specific regions like Africa, Europe, Latin America, and the United States.

Patterns and Trends:

- The **U.S.** has responded to Al-Qaeda and Iraq, but the threat has expanded to North Africa, the Middle East, Sub-Saharan Africa, and beyond.
- **Religious Extremism:** The threat has spread rapidly to other parts of Asia.
- **Economic Factors:** Failed governance, corruption, and lack of economic development contribute to terrorism.
- **Internal Instability:** Terrorism can emerge as a result of internal instability.

Key Challenges:

- **Reporting Challenges:** Coordinated attacks in the absence of traditional methods and reporting make historical comparisons difficult.
- **Hate Crimes**

## Form a proper table:

Many columns and rows too many null values are in the data set.

To form a transform data relationship in global terms and remove null values.

## Data set in global terms



## Power BI Powered Global Terrorism Dataset Analysis.csv

File Origin1252: Western European (Windows)DelimiterCommaData Type DetectionBased on first 200 rows

eventid	year	imonth	iday	approxdate	extended	resolution	country	country_txt	region	region_txt	provstate	city	latitude	longitude	specificity	vicinity	
1.97E+11	1970	7	2		0		58	Dominican Republic	2	Central America & Caribbean		Santo Domingo	18.456792	-69.951164	1	0	
1.97E+11	1970	0	0		0		130	Mexico	1	North America	Federal	Mexico city	19.371887	-99.086624	1	0	
1.97001E+11	1970	1	0		0		160	Philippines	5	Southeast Asia	Tarlac	Unknown	15.478598	120.599741	4	0	
1.97001E+11	1970	1	0		0		78	Greece	8	Western Europe	Attica	Athens	37.99749	23.762728	1	0	
1.97001E+11	1970	1	0		0		101	Japan	4	East Asia	Fukouka	Fukouka	33.580412	130.396361	1	0	
1.97001E+11	1970	1	1		0		217	United States	1	North America	Illinois	Cairo	37.005105	-89.176269	1	0	
1.97001E+11	1970	1	2		0		218	Uruguay	3	South America	Montevideo	Montevideo	-34.891151	-56.187214	1	0	
1.97001E+11	1970	1	2		0		217	United States	1	North America	California	Oakland	37.791927	-122.225906	1	0	Ede
1.97001E+11	1970	1	2		0		217	United States	1	North America	Wisconsin	Madison	43.076592	-89.412488	1	0	
1.97001E+11	1970	1	3		0		217	United States	1	North America	Wisconsin	Madison	43.07295	-89.386694	1	0	
1.97001E+11	1970	1	1		0		217	United States	1	North America	Wisconsin	Baraboo	43.4685	-89.744299	1	0	
1.97001E+11	1970	1	6		0		217	United States	1	North America	Colorado	Denver	39.758968	-104.876305	1	0	
1.97001E+11	1970	1	8		0		98	Italy	8	Western Europe	Lazio	Rome	41.890961	12.490069	1	0	
1.97001E+11	1970	1	9		0		217	United States	1	North America	Michigan	Detroit	42.331685	-83.047924	1	0	
1.97001E+11	1970	1	9		0		217	United States	1	North America	Puerto Rico	Rio Piedras	18.386932	-66.061127	1	0	Cap
1.97001E+11	1970	1	10		0		499	East Germany (GDR)	9	Eastern Europe	Berlin	Berlin	52.50153	13.401851	1	0	
1.97001E+11	1970	1	11		0		65	Ethiopia	11	Sub-Saharan Africa	Unknown	Unknown	null	null	5	0	
1.97001E+11	1970	1	12		0		217	United States	1	North America	New York	New York City	40.697132	-73.931351	1	0	Bro
1.97001E+11	1970	1	12		0		217	United States	1	North America	Puerto Rico	Rio Grande	18.379998	-65.830948	1	0	
1.97001E+11	1970	1	13		0		217	United States	1	North America	Washington	Seattle	47.610786	-122.331306	1	0	

The data in the preview has been truncated due to size limits.

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Extract Table Using Examples

Load

Transform Data

Cancel

## Select row and columns:

Nest to choose the columns are,

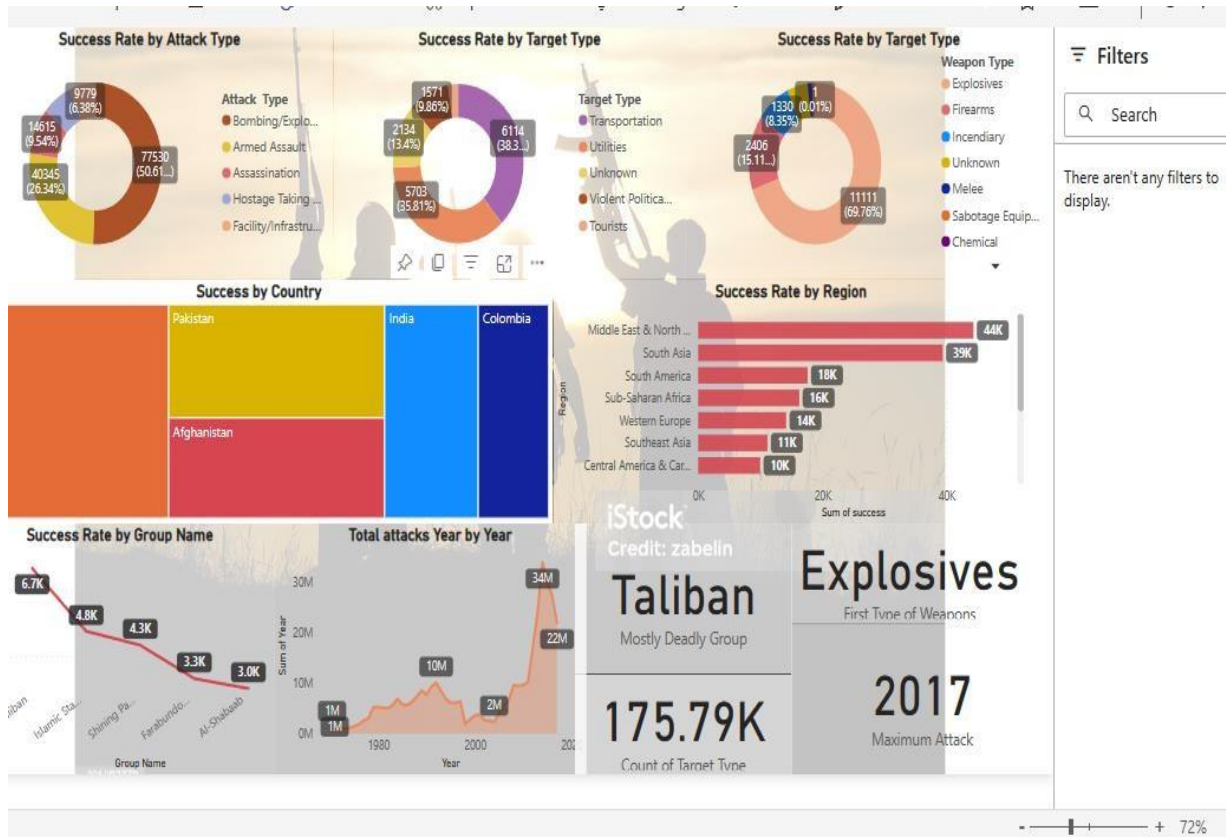
- Country
- Target type
- Year
- Region
- Attack type
- Target Nationality
- Group Name
- Success rate
- Weapons type

These are the relationship between global terrorism in dashboard.

## Dashboard

### The relationships between

- **Success rate and attack Type**
- **Success rate and target Type**
- **Success rate and region**
- **Success rate and country**
- **Total attack Year by Year**
- **Success rate and weapons type**



## CONCLUSION

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→ o rcítile gíó"→ d.



## FUTURE SCOPE

The future scope of global citizenship is a critical consideration that requires comprehensive strategies and international cooperation. Hence, some key points to consider:

Global Programme on Civic Engagement and Co-creating Citizenship (2022- 2027):

- The United Nations Office of the High Commissioner for Human Rights (UNOHCHR) has launched a **Global Programme** with a mission to **effectively promote citizenship**.
- The programme aims to support **Member States** in their efforts to promote and co-create citizenship through national strategies, policies, and legal measures.
- It emphasizes the safety and protection of people, ensuring that no one is left behind.
- The programme builds upon the success of UNOHCHR's previous programme, which started in 2008 to 2022.
- Key outcomes include increased adherence to international legal frameworks, national citizenship measures, and effective civil and justice spaces.

Emerging Key Themes:

- O:cí tke →ext two decades, se:cíal ractóís aíc likeIQ to exaccíbate tke co→ditio→s exploited bQ teíóíists:

- **Regio→ al a→ d i→ tíastate co→ flicts:** O→ goi→ g co→ rlicts cícate rcítile gío"→d roí extícmist idcologies a→d íccí"ítmc→t.
- **Demogíapkie pícssuíc:** Pop"latio→ gíowtk, migíatio→, a→ d "íba→ izatio→ ca→ stíai→ ícso"íccs a→ d lead to social te→sio→s.
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- Addícssi→g íoot ca"scs, píomoti→g social i→cl"sio→, a→d c→ ka→ ci→ g i→ teí→ atio→ al coopciatio→ ícmai→ cí"cial i→ tke rigkt agai→st teíóíism.

## REFERENCES

[PowerBI Case Study Sample Report.docx \(live.com\)](#)

## LINK

<https://github.com/Evange2208/Evange22>