**INSIGHTS OF THIS PROJECT:Power BI Dashboard Creation -Terrorism Database**

Step1: Data Preperation

1. Handling Missing Values:

Replaced missing values using a method of imputation, specifically by generating random data points. This ensures completeness in the dataset and prevents information loss.

1. Data Cleaning:

Removed columns with missing values that were deemed unnecessary or not utilized in subsequent analysis. This step streamlines the dataset for improved clarity and computational efficiency. I removed :

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| targtype2\_txt | targsubtype2 | targsubtype2\_txt | corp2 | target2 | natlty2 | natlty2\_txt | targtype3 | targtype3\_txt | targsubtype3 | targsubtype3\_txt | corp3 | target3 | natlty3 | natlty3\_txt |

1. Data Type Checking:

Performed data type checking to validate and standardize variable types across the dataset. Ensuring consistent data types is crucial for accurate analysis and visualization.

1. Outlier Identification:

Focused on the Country column, a numerical field, to identify potential outliers using Z-Scores. Z-Scores were calculated to quantify the deviation of each data point from the mean, providing a standardized measure of significance.

1. Outlier Filtering:

Implemented a filter to include only those data points with Z-Scores below a specified threshold. Values equal to or greater than the threshold were considered outliers. This meticulous approach ensures that outliers are identified and handled systematically.

Insights Derived:

* + The meticulous handling of missing values and outliers has resulted in a robust and clean dataset, laying the foundation for accurate analysis.
  + The focus on the Country column for outlier detection provides a targeted perspective on potential anomalies, enhancing the overall data quality.
  + This data preparation process adheres to best practices in data hygiene and analysis, contributing to the generation of reliable insights for informed decision-making.

Step2: Data Visualization

1. Insight: Unveiling Trends in Terrorist Activity Over Time

The line chart depicting the count of terrorist attacks over the years provides a snapshot of temporal dynamics in global security. Noteworthy observations include:

Fluctuating Frequencies: The line chart reveals noticeable variations in the number of attacks across different years, indicating dynamic trends in terrorist activity.

Temporal Peaks: Peaks in the chart may signify periods of heightened security concerns, warranting closer examination to discern patterns and potential correlations with significant global events.

2. Insight: Geographic Distribution of Attacks

Attack Type3 incidents are concentrated in Europe and Asia, contrasting with sparse occurrences in North America. Conversely, Attack Type7 is predominant in North America. This highlights regional variations in attack types, suggesting diverse motivations or influences in different parts of the world.

3. Insight: Predominance of Unknown Explosives in Maximum Attacks

A striking trend emerges as the dataset reveals that the highest number of attacks is attributed to weapon subtypes 10 and 16, identified as "Unknown explosives." This underscores a concerning challenge in counterterrorism efforts, highlighting the prevalence of covert weaponry, demanding intensified intelligence and preventive measures to address this elusive threat effectively.