Project Title: USA Police Killing Analyses

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Introduction

Project Objective: The objective of this project is to develop a comprehensive report and dashboard using Power BI to analyse trends in police killings across the USA. This analysis aims to uncover critical insights into patterns and factors associated with police killings, providing a data driven foundation for understanding these events. The dashboard will serve as a decision support tool for policymakers, researchers, and advocacy groups, highlighting key metrics and performance indicators related to police violence.

Scope: The project will focus on developing a dashboard that aggregates and visualizes data on police killings in the USA. It will include various aspects such as demographic breakdowns of victims, geographical distribution of incidents, trends over time, and contextual factors (e.g., crime rates, socioeconomic status). The dashboard will facilitate informed decision making and strategic planning for stakeholders involved in law enforcement reform, social justice initiatives, and community safety efforts.

Data Preparation

This was the initial phase of the project where the data went through some transformation before the dashboard development began. The data was provided by Blossom Academy in an excel format. This dataset was then loaded onto Power BI where the cleaning and modelling began. The various bullet points elaborate on the steps taken to clean and prepare the data.

- **Data Source:** The data that was used in this project was provided by Blossom in an excel document. The data consisted of 15 fields or attributed which described the deaths that occurred in between 20215 and 2020 in the USA. Some of the fields included, id, gender, department, age, manner of death and the individual involved as well as States, etc.
- **Data Cleaning:** For the data cleaning process, firstly, we reviewed the various field to which revealed that the various fields were in their proper data type for the analysis. In this process, some changes we did was changing the Id into text, and others.
- **Data Preparation:** new table was created which contained the various states in the USA and their initials. This new table was then liked to the shooting table using the state initial filed in both filed

Dashboard Design, Features, and Visualization

The dashboard ensures data accuracy through thorough data handling processes, including data cleansing and preparation. It features interactive capabilities, allowing users to filter data by various criteria such as gender, manner of deaths and states. The final presentation includes a concise report explaining design choices, insights gleaned from visualizations, and actionable recommendations for decisionmakers based on the data presented.

- From the analysis a total of 4895 deaths are recorded in the data with an average age of victims being 37 years. These deaths were recorded in 2287 cities.
- Age Distribution: The age distribution shows the highest number of deaths occurring between the ages of 20 and 40, with a sharp decline as age increases. The peak is age 30 with a record 1549 people. This shows us that most people are dying around age 30.
- Trends in Death Over the Years: The number of deaths shows a decline over time:

  2015: Over 900 deaths, 2020: Less than 400 deaths.

  This indicates a steady downward trend in the number of police killings over the past few years.
- Signs of Mental Health: A significant portion of the victims had no signs of mental illness at the time of death, with about 4000 deaths marked as not related to mental health. However, approximately 1000 deaths involved victims showing signs of mental illness.
- Manner of Deaths: The majority (around 94.93%) of deaths were caused by gunshot. A smaller portion (5.07%) were deaths caused by both shot

and tasered.

- Death by Arm Category: Guns were the most common arm used in these incidents, followed by sharp objects. There are also incidents involving unknown weapons, unarmed individuals, and other categories such as vehicles and blunt instruments.

- Death by Manner of Fleeing: Most victims were not fleeing at the time of their death. For those who were fleeing, cars, foot, and other methods were involved.
- Gender Distribution of Deaths: The gender breakdown shows that 95.46% of victims were male and 4.54% were female, indicating a substantial gender disparity in the victims of police killings.
- Race Distribution of Death: From the analysis White people(2478) are the once falling victims to police killing compared to the other 5 races namely: Black, Hispanic, Asian, Native and others. People from the black race were the second highest with a total death of 1298 count.
- Body Camera Record: In all, 88.19% of these incident did not have body camera's present to record what ensured.

Key Insights

The analysis reveals that a total of 4895 deaths were recorded, with an average victim age of 37 years. The majority of these deaths occurred among individuals

aged 20 to 40, peaking at age 30. A steady decline in deaths was observed from 2015 to 2020. Notably, 95.46% of the victims were male, and 94.93% were killed by gunshots. Additionally, most incidents were not related to mental illness, and 88.19% of cases lacked body camera recordings.

Analysis

The data indicates a clear demographic pattern, with younger males, particularly around age 30, being disproportionately affected. White individuals made up the largest racial group among victims, followed by Black individuals. Despite the declining trend in deaths, the high use of guns as the primary weapon and the minimal presence of body cameras are concerning, as they suggest both excessive force and a lack of transparency in many incidents.

Trends

A notable trend is the decrease in police killings from over 900 deaths in 2015 to fewer than 400 in 2020, reflecting potential improvements in law enforcement policies or reporting practices. The data also shows that a majority of victims were not fleeing at the time of their deaths, which raises questions about the use of force during non-threatening situations.

Implications

These findings have profound implications for law enforcement practices and policy reforms. The disproportionate impact on certain racial groups, particularly Black individuals, highlights issues of systemic bias within policing. The lack of body camera footage in most incidents undermines accountability, making it difficult to assess the circumstances surrounding many deaths.

Recommendations

It is recommended that law enforcement agencies increase the use of body cameras to ensure greater transparency and accountability. Further, de-escalation training and bias reduction programs should be prioritized to reduce unnecessary use of force, especially in non-threatening scenarios. Special attention should be given to addressing the racial disparities revealed in the data, focusing on improving police-community relations.

Conclusions

The analysis of police killings in the USA highlights several areas of concern, including the high use of deadly force, racial disparities among victims, and the lack of accountability mechanisms such as body cameras. While there is evidence of a declining trend in deaths, significant reforms are still needed to ensure that policing practices are both just and transparent.