Kia and Hyundai Car Theft Data Analysis

# Audience

The audience for this analysis includes designers and engineers responsible for vehicle security at Kia and Hyundai. These professionals play a critical role in shaping the security features of vehicles and are directly involved in mitigating theft risks. Their focus should be on understanding the vulnerabilities in current models and taking proactive steps to resolve them.

# Purpose

The purpose of this analysis is to highlight the increasing rates of Kia and Hyundai vehicle thefts in several U.S. cities, emphasizing the urgency for improved security measures. By providing a data-driven breakdown of theft patterns over time and across different regions, this analysis advocates for targeted design improvements. The call to action urges the audience to enhance anti-theft features and collaborate with urban authorities in high-theft areas.

# Medium

The findings of this analysis are presented through a PowerPoint presentation. This medium was chosen to effectively combine visual and textual information, making it easy for vehicle designers and security engineers to interpret theft data and respond accordingly. The visualizations, including pie charts, bar charts, and area charts, provide a clear representation of the data, encouraging actionable insights.

# Design Choices

The visual and textual elements in the presentation are designed for clarity and ease of comprehension.

* **Color:** Distinct color schemes are applied to differentiate data categories, such as Kia vs. Hyundai thefts, making trends and disparities more noticeable.
* **Text:** Simple, concise language is used throughout to avoid overwhelming the audience with technical jargon. Key takeaways are emphasized to highlight the most critical insights.
* **Alignment and Sizing:** All visual elements are organized systematically, guiding the viewer's attention toward key data points without unnecessary distraction.
* **Spacing:** Adequate space between chart elements ensures clarity, making it easier to interpret theft trends across time and regions.

# Ethical Considerations

The analysis openly acknowledges the limitations of the data, such as potential gaps in data reporting from certain regions or timeframes. Transparency about these limitations is crucial to ensure that the recommendations made are based on reliable data. Ethical considerations have been managed by avoiding any manipulation of data to exaggerate trends and focusing on honest representation of the theft rates.

The analysis aims to foster collaboration between vehicle designers and security teams, encouraging them to prioritize security improvements in future vehicle designs.