

Project: No More Accidents

By Tri Cao Chanh

EDA Dashboard link:

<https://public.tableau.com/app/profile/cao.tr.5954/viz/AccidentsinAddisAbabaCityAnalysisDashboard/Dashboard1>

Story link: <https://public.tableau.com/app/profile/cao.tr.5954/viz/AccidentsinAddisAbabaCity-FinalStory/NoMoreAccidentsProject-AddisAbabaCity>

Leaflet (infographic):

<https://public.tableau.com/app/profile/cao.tr.5954/viz/AccidentsinAddisAbabaCity-Leaflet/RoadAccidentsLeaflet?publish=yes>

Project Proposal Week1: No More Accidents

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Road traffic accidents are a major global concern, resulting in millions of deaths and injuries each year. A data-driven solution to this problem would involve collecting and analyzing data on road accidents to identify patterns and risk factors. This information could then be used to develop targeted interventions, such as improved road infrastructure, public education campaigns, and stricter enforcement of traffic laws. By using data to guide our efforts, we can more effectively address the underlying causes of road accidents and prevent needless tragedies on our roads.

Why:

The objective of this project focused on road traffic accidents would be to reduce the number and severity of accidents on the roads. This would involve using data analysis to identify patterns and risk factors associated with accidents, such as driver behavior, road design, and vehicle types. By understanding these factors, we can develop targeted interventions to address specific areas of concern.

For example, data analysis may reveal that a particular stretch of road has a high incidence of accidents due to poor visibility or inadequate signage. In this case, the intervention might involve improving lighting or adding more visible signage to alert drivers of potential hazards. Alternatively, data analysis may indicate that a certain demographic group, such as young drivers


or seniors, is at a higher risk of accidents. In this case, the intervention might involve targeted education and awareness campaigns aimed at changing behaviors and reducing risks.

Ultimately, the goal of a data-driven project focused on road traffic accidents is to save lives and prevent injuries by using evidence-based interventions to address the underlying causes of accidents. By leveraging the power of data analysis and technology, we can make our roads safer and reduce the toll of human suffering caused by road accidents.

Who:

The stakeholders in a road traffic accident project include government agencies, law enforcement, drivers, passengers, pedestrians, and emergency responders.

Main audience: policymakers

Persona 1: Tony (Policymaker)	
<p>Role: Senior Policymaker in Addis Ababa</p> <p>Age: 35 Gender: Male Education: Master of Politics</p> <p>Goals:</p> <ul style="list-style-type: none">• Reduce traffic accidents• Prefer a data-driven decision making• Insightful information• Raise community awareness <p>Challenges and Needs: the number of traffic accidents in Addis Ababa keeps increasing day by day. Early action is required. What policy should be adjusted?</p> <p>Context: Final result presentation, meeting with the council at the end of April, 10~20 audiences in a big meeting room.</p>	 <p><i>The sooner the policy is adjusted, the lesser life be lost.</i></p> <p><i>Tony is an open-minded policymaker, with lots of concern for building this city a better place.</i></p>

What:

The dataset used: Road Traffic Accidents

Summary: Road Traffic Accident Dataset of Addis Ababa City has been prepared from manual records of road traffic accidents of the year 2017-20. All the sensitive information has been excluded during data encoding and finally, it has 32 features and 12316 instances of the accident.

How:

The outcome of this project will be presented in 3 ways: one dashboard, one infographic, and one story.

- An interactive dashboard should be monitoring the overview of the data, which can be freely explored by the users.
- An infographic should be revealing stunning insights, targeting the community to raise awareness of transporting safety.
- A convincing story should be a weapon enhanced with correct insights, targeting the policymakers to take action as soon as possible.

Challenges:

Lack of domain knowledge and unfamiliar dataset settings (Addis Ababa city)