**MGMT 479 Individual Project Proposal**

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For the individual project, I choose to analyze the data “[Deadly traffic accidents in the UK(2015)](https://www.kaggle.com/datasets/kwullum/deadly-traffic-accidents-in-the-uk-2015)”. This dataset is taken from data.gov.uk and contains 32 columns and 140,056 unique values. It stores data such as accident severity, police force, road type, road surface conditions, and weather conditions. This dataset attracts me because I traveled to the UK recently. This dataset appeals to me because I have traveled to the UK in the recent past. During my few days in the UK, I could feel a profound difference from my time in the US, not only in the accent but even visually in the traffic as well. Like the dissimilar in driving between left-hand drive and right-hand drive cars, there are more differences in traffic rules.

The audience of my project is policymakers at transportation department. They are the people who have the ability can change the rule or ground transportation environment to improve the problem. In essence, I want to create a visualization from this dataset to make some actionable plan. By analyzing this dataset, I will provide some insight from this dataset to demonstrate that some traffic accident data in a particular area (since I want to make an actionable plan, I think I need to focus on a specific area rather than the whole UK) will have correlation with some condition. Second, I will highlight some important information from this visualization which will allow policymakers to quickly understand what problem is existing in this area. At the same time, I will show my analysis process in the report. The reason is I want to keep this data transparent, which will make my conclusion creditable and convey the policymakers. Lastly, I wish my project is valuable for policymakers to make decision.

My analysis will follow these questions:

1. What is the overall trend in the number of deadly traffic accidents over time? Is there any trend broken down by different factors, such as weather conditions, road surface conditions, or urban/rural areas?
2. Are there any factors that are coefficient with the deadly traffic accidents? Which 5 factors are most correlated and common to deadly traffic accidents?
3. What are the certain times of day or days of the week when accidents are more likely to occur? Are these days related to festivals or football game days?
4. How effective have recent policy interventions (such as changes in speed limits or road design) been in reducing accident rates? Are traffic direction signs effective in reducing the frequency of accidents?
5. How does the presence of police officers at the scene of an accident affect the likelihood of fatalities or serious injuries? And is the police force having a relationship with serious injuries?
6. What are the most dangerous roads and intersections in the region, and how can they be made safer?