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REPORT LAB EXERCISE 1

"Conditions and Factors Involved in Road Accidents in the US"

Intro to Business

- **Industry**: Transportation
- **Company:** AI Consulting Inc.
- **Functional Area:** Urban Risk Management
- **Objective and Scope:**
  - To study and identify the impact of locations, weather conditions and other environmental factors responsible for severe road accidents and generate alerts to the public to take safety measures during similar situations
  - To help the city planners understand which features are most crucial for road safety and which areas are in the highest need of improvement
- **Business process(es) to improve:**
  - Regarding different business purposes, business processes come in different shapes, therefore, various life cycles. With our current objective, we will focus on the core operational process, which directly creates revenue and adds value to end customers (the government). More specifically, we consider dividing into deep investigation, project planning, project implementation/control, and evaluation.

Data Acquisition

- Acquire and/or generate the data source(s) that you will need for your case study
  - Countrywide traffic accident dataset of the US, which covers 49 states. Kaggle: https://www.kaggle.com/datasets/sobhanmoosavi/us-accidents
  - Dataset is collected from February 2016 to December 2021, consisting of about 1.5 million accident records in this dataset