NAVEEN JINDAL SCHOOL OF MANAGEMENT
The University of Texas at Dallas

Risk Factor Analysis

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Business Objective

Identifying the dangerous commercial truck drivers working at A-Z National Trucking corporation headquartered in California

Problem Statement

Accidents caused by large trucks remain one of the leading causes of injuries and deaths in the United States. By analyzing the truck fleet data, dangerous commercial truck drivers and their risk factors need to be identified in order to meet ANT's organizational goals of better understanding risk and to revise truck movements to increase safety.

Results and Insights

- Found drivers with high risk factor using telematics events & mileage
- Discovered the trucks that recorded low gas mileages in their lifetime
- Located cities with high density of dangerous events and idling trucks
- Identified the top truck models that got involved in dangerous events

Process Flow

Local File System
XLSX sheets converted into separate files in ***CSV*** format

Cloudera VM
Files transferred to the ***VM*** using ***scp*** command

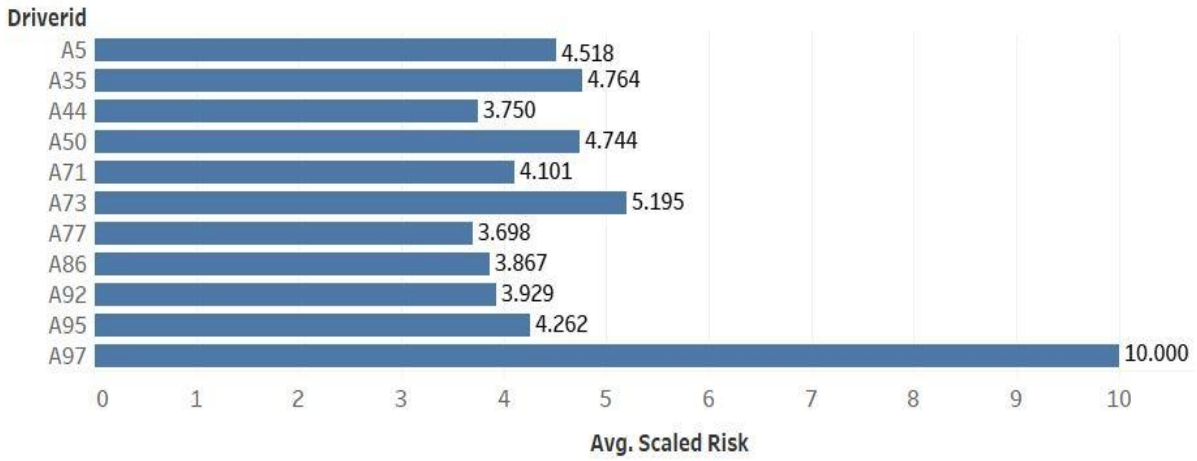
HDFS
Files loaded to ***HDFS*** from ***VM*** using ***put*** command

Empty Tables
Created empty tables in ***HIVE*** for each ***CSV*** file

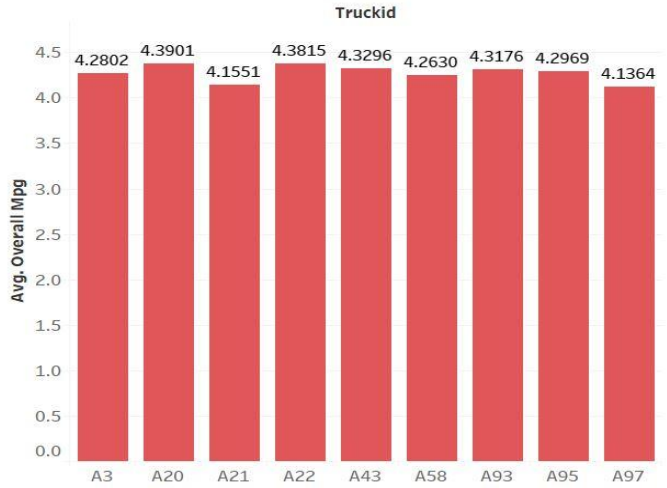
HIVE
Data loaded from ***HDFS*** into ***empty tables*** created in ***HIVE***

Tableau
Integrated ***Tableau Server*** to ***HIVE*** and loaded data

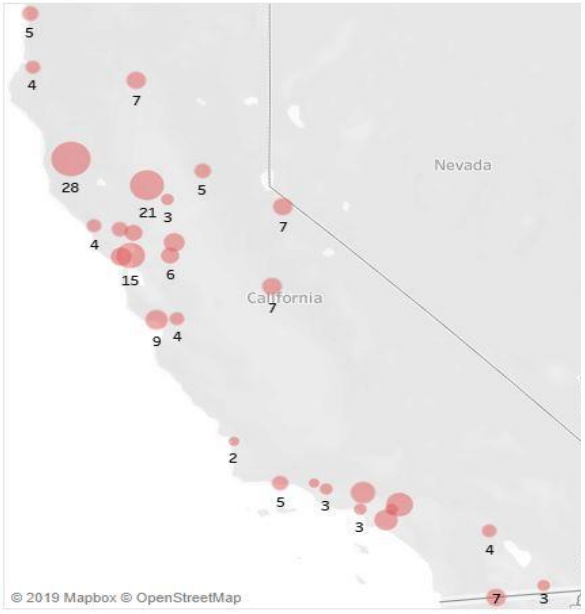
Risky Drivers



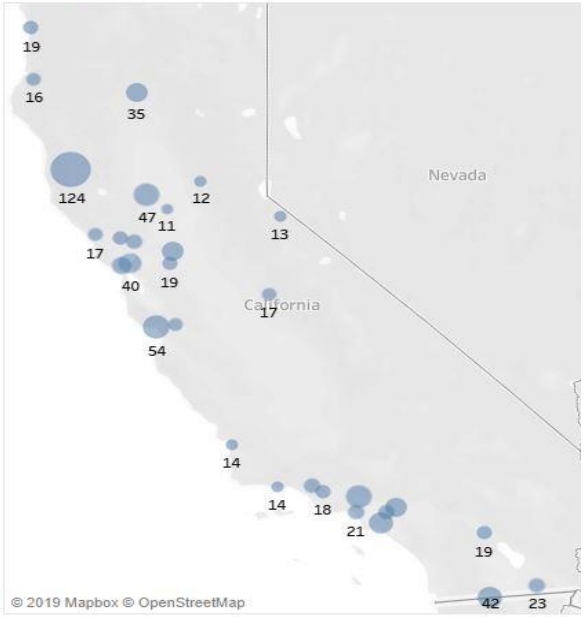
Low MPG Trucks



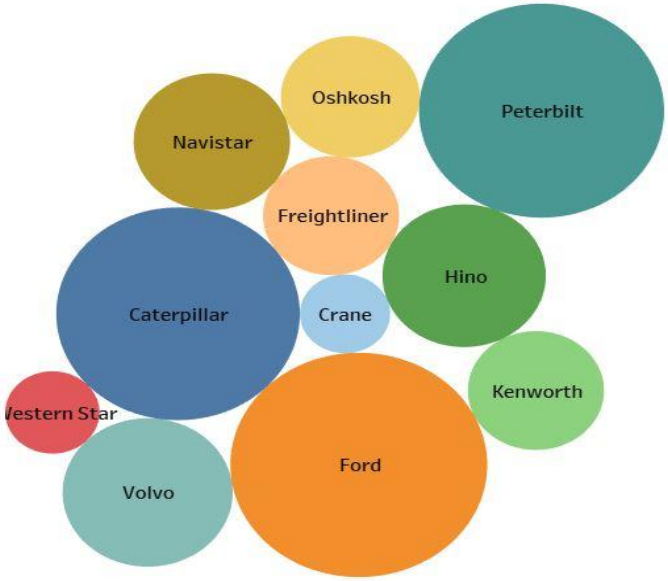
Risky Events



Idling Trucks



Risky Models



THANK YOU!

ANY QUESTIONS?