



How to improve your Fleet management with data analytics

Description

Provides a Real time tracking of vehicles in order to optimize time, safety and resources, the solution displays a single view of the all the fleet types operating across the country on geographic mode including the various other factors affecting the fleets operation.

A decision support system (DSS) is developed to solve the fleet planning problem. The system can be used by fleet managers to plan fleet size and mix. The decision support system was designed to assist managers in every step of the planning process

Challenge

- Customer wants to make its fleet operation more efficient and safe to commuters. Customer needed a solution to monitor the fleet locations, environment, road and weather conditions and decision support system for addressing the problems and concerns faced by commuters while using the fleet management.
- Irrespective of changes in the climatic conditions, client wants their business to run efficiently without any issues. Fleet managers and the service technicians who support them need to be aware of the issues and formulate their own strategies. They need a solution to continuously monitor the weather condition in the zones to prevent the delay in service

- One of the biggest influencers of modern fleet management is the use of big data in decision making. Data can be generated through a number of mechanisms. Trawling through such vast amounts of information is time consuming and runs the risk of missing important, relevant information. Telematic platforms, which collect real-time data through sophisticated vehicle monitoring technology, can provide rich data sets on a number of key metrics.

Solution

- Data is retrieved from various sources like Sensors, Social Media, API's near real pushed into data storage system which is a distributed streaming platform, streams of data are stored in a fault tolerant way and process the streams of records as they occur
- The visual displays the geographical view of movement for fleet types in real time, and alerts showing for train occupancy and weather conditions at different locations. Options to select different lines and monitor the vehicle movement. The bus movements and the road conditions are highlighted in different shades.
- Analysing customer opinions using social media data can be a great way for the business to enhance their objectives and operations. Unstructured tweets are analysed to extract the polarity and emotional classifications based on the customer experience. Emotions are categorized as positive and negative tweets related to fleets management and incidents and are displayed in the visual.
- Alerts are set up and customized to monitor specific business rules and the geographical map allows you to easily monitor how the fleet is performing overall.

Benefits

- Live tracking of all fleets types to ensure smooth operations, and track incidents and failures of fleets occurred at Metro lines and bus routes with visuals which improves efficiency in managing fleet and assets data without any discrepancy
- Based on passengers on- boarding and alighting able to plan fleet size, alternate plans & solve the problems quickly to ensure customer satisfaction, safety and operational efficiency. Also enhances the quality of the customer service and develop efficiencies to make the service more effective
- Improves delivery time and reduces wait times for customers irrespective of the fleet. Helps to provide a more efficient and effective service to all of your customers, regardless of the operation you run. When customers are getting high quality service, they will be more likely to stay loyal and return for additional service.
- Helps business to remove or minimize the risks associated with vehicle investment, improving efficiency, productivity and reducing their overall transportation and staff costs, providing 100% compliance with government legislation (duty of care). Let's you see the patterns that can negatively affect your business.