Case Study on Route Optimization

Perceptive Analytics
New Jersey | Miami | Hyderabad
(646) 583 0001 cs@perceptive-analytics.com
Case Study: Route optimization

Business Challenge:

The client is a logistics company with around 250 branches and operating around 300 trucks. The client has a traditional hub and spoke network with 10 transshipments. The routing and scheduling of the trucks was decentralized at each branch creating a repetition of services on the same routes. The challenge for the company was to develop a process that can be centrally monitored to make the routing of the trucks more easily accessible to the top management.

Solution:

After a detailed study of the operations of the client, the type of services were segregated into On-Account and Paid depending upon the type of payment and frequency of repeat business. It was also discovered that the repeat business needed the deliveries to be made at the same locations each time. We developed a model for each of these On-Account businesses which are used at each of the 10 transshipments to generate the most optimum route with ability to add/modify locations. As you can see from the picture below, route was streamlined to save time and cost.

Result:

Using our model the client was able to optimize the routing of the trucks for their On-Account business. The model helped the client make considerable savings in the fuel costs and driver wages due to reduced distances and working hours respectively. The client also gained transparency and control over the routing of trucks. The model has been deployed successfully and we are looking to develop similar model for their Paid part of business.