

CASE STUDY

Data Driven Digital Transformation of a Transportation & Logistics Services Provider | A Transportation Analytics Case Study by Quantzig



The client is a leading **transportation and logistics** service provider with operations spread across North America. They specialize in offering car rental services, as well as vehicle sharing and leasing solutions to cater to the diverse needs of its customer base.

The Business Challenge

The rapidly growing business landscape and the acceleration of exploitable and open-ended, unstructured data, has triggered significant disruptions across industries, including the transportation industry. However, most transportation and logistics service providers haven't kept pace with the proliferation of datasets that are now easily available to them. The exponential growth of transport data sets has spurred the adoption of advanced transportation analytics models to tackle the challenges arising due to the rising volumes of data. The challenges have further been compounded by the rising concerns surrounding the identifiable nature of data that is being collected without the consent of the transmitter.

Transportation analytics helps businesses to integrate transport data with data obtained from other databases by leveraging sophisticated machine learning algorithms to extract maximum insights from data. A leading transportation and logistics services provider faced similar issues which spurred them to revamp their operational processes to reduce transport costs and increase its fleet utilization rate. By leveraging Quantzig's transportation analytics solutions, they wanted to transform the fleet management process and enable more accurate fleet transfer decisions by centralizing and automating their fleet data management systems.

Solution Offered and Value Delivered

Quantzig's deep expertise in applying **advanced analytics**, machine learning algorithms, and AI to transport and sales data empowered the client to identify and integrate new data sets to identify better route plans and optimize their strategies. With the help of advanced transportation analytics solutions, the client was to identify and capitalize on new opportunities to drive business growth, create value, digitize business processes, and optimize routes.

We adopted a comprehensive two-phased approach to help the client tackle their challenges.

Phase 1

The initial phase of this transportation analytics engagement revolved around data discovery and analysis to better understand the client's needs and challenges faced by them.

Phase 2

The second phase of this transportation analytics engagement revolved around analyzing transportation analytics models to find the one which helps them address their challenges.

Following this, the client was able to establish a centralized database to eliminate the data redundancy and better understand market needs. A streamlined approach eliminated the needs for manual routing and monitoring processes. As a result, they now predict demand with an accuracy of 80%, due to which their profit margins increased by 3%, while their vehicle transfer and idle time decreased significantly.

Quantzig's transportation analytics expertise also empowered the client to:

- Improve fleet utilization rate by a whopping 15%
- Integrate and orchestrate all its IT systems to improve operational efficiency and reduce risks