

A Dubai-based taxi
service provider improved
its demand forecasting
accuracy with a state-of-theart predictive analysis system

About Client

Business Requirement



Tools & Technologies



COUNTRY UAE INDUSTRY
Travel & Transport

About Client

The client is a subsidiary of Roads and Transport which provides its customers with a range of services, comforts, and customer care, with the highest levels of transportation quality standards.



Business Requirement

- High percentage of non-revenue trips: Taxi spends half of its operational time on non-revenue trips, and the other half have riding customers
- Commercial viability: Operational cost against revenue is high, which in the long run may limit business development
- Technology and innovation: Lack of taxi demand visibility barricades adequate provisioning at the 'right place' and at the 'right time'
- Limited knowledge of the taxi demand: Limited data and visibility resulted in inefficient operations with long passenger wait time and several vacant trips







Our Solution

A state-of-the-art AI/ML-based predictive analysis system for forecasting the Taxi Demand at any given future time, based on various inputs along with integration with various systems/ sources running in the client environment.

- A web application that provides future predictive analysis statistics and various other useful information to help critical business decisions
- Android mobile application to accept requests and earn incentives on the trips drivers make in high demand areas
- Prediction of taxi demand from historical and real-time data sources
- Prompt the most optimized route for the driver through a mobile app with the highest probability of getting rides

- Dynamically re-optimize & propose new route, when demand drops in the area of taxi movement
- Help the operations team to make micro-decisions based on the predicted demand in future



Tools & Technologies



























Business Outcome



Improved taxi engagement ratio (Engaged/Vacant)



Reduced passenger wait time



Reduced idle time of the driver with quick updates



Augmented revenue/non-revenue kilometer ratio



Improvised revenue/kilometer



Increased number of revenue trips



Advanced analytics reports improved decision making





Cygnet Infotech

Established in 2000, Cygnet Infotech works with clients across 35 countries and has a strong team of over 1000 employees. Cygnet Infotech's offerings range from IT Services, Technology Products, and Tax Technology solutions. Aligned with its vision of providing technology enabled business solutions, Cygnet Infotech delivers end-to-end solutions for clients' most pressing business needs.

Cygnet Infotech's Technology Services enables clients to accelerate growth and optimize business operations through, Product Engineering, Bespoke Solutions, IT Modernization, Automation, Implementation Services, Risk Mitigation Services, Information Security & Compliance Services, and IT Staff Augmentation.



Cygnet DES is a partner to clients in the competitive market space and deploys a consultative and customer-centric approach. Its solutions range from standalone bespoke development and managed services to building connected ecosystems across the enterprise and developing smart systems by leveraging emerging technologies like AI, Blockchain, and Hyperautomation.