

Business Case: Improving Transport Visibility & Sustainability

General Information

YCH is a Singapore-based Third-Party Logistics Company. Transport requirements come from different customers (i.e., FMCG, Electronics, Food, and Fashion industries) in which the locations, product characteristics, and delivery windows can vary vastly from day-to-day.

The conditions of delivery conditions may restrict the type of vehicles used and further compound the challenges in effective transport planning to locations such as shopping malls, data centers, and loading bays.

Ineffective routing not only increases transportation costs amid rising fuel prices, but also carbon emissions and may result in poor customer satisfaction.

Issues Encountered

Serving over more than 10 service partners that require local transportation, it has posed a challenge for the company to plan the fleets resource efficiently with various requirements such as location, product characteristics, and delivery window. These requirements vary vastly from day-to-day, which limits the effectiveness of advance scheduling.

Furthermore, delivery conditions like delivery window bookings, specific delivery timing, and locations within shopping malls, data centers, and loading bays may restrict but not limit to the type of vehicles used, and further complicates effective transport planning.

The company believed that these ineffective routing has resulted in increases transportation costs amid rising fuel prices and make its rate uncompetitive in the market. Also, this further creates challenges to reduce environmental impact in our business.

Requirements

To explore advance concepts and tools namely those with AI capabilities to help the Transport team to:

- Improve route optimization and assigning vehicles based on site limitations,

- Reducing dead miles,
- Automate notifications to customers instead of relying on manual control tower using messaging platforms,
- Right-sizing fleet capacities to meet demands of service partners, and
- Driving down carbon emissions and aligning YCH with the national goal of achieving net zero emissions by 2050.

In summary, the company would like to track its progress from current as-is state and improvements via the participants' proposed fleets optimization concepts and tools namely, quantifying the cost saving in the form of revenue per kilometer travelled, petrol cost and carbon emissions of the fleet, and others.

Open House

The Open House will be on:

1. 3rd May between 4-6 pm
2. 4th May between 10-12 pm
3. 6th May between 4-6 pm
4. 7th May between 4-6 pm

Contact person: Ng Han Xiang Email: hanxiang.ng@ych.com

Team leader to send email to the contact person in advance regarding the number of persons going to the open house.