**DELHIVERY BUSINESS CASE STUDY**

**About Delhivery**

Delhivery is the largest and fastest-growing fully integrated player in India by revenue in Fiscal 2021. They aim to build the operating system for commerce, through a combination of world-class infrastructure, logistics operations of the highest quality, and cutting-edge engineering and technology capabilities.

The Data team builds intelligence and capabilities using this data that helps them to widen the gap between the quality, efficiency, and profitability of their business versus their competitors.

Insights:

* 60% of the total orders were in the carting category and 40 % were from FTL.
* Data presented that 87% of the orders took place in the 9th month and only 13% were in 10th month
* The data was only for the year 2018.
* Highest frequency for actual\_time, osrm\_time, segment\_actual\_time, segment\_osrm\_time columns were seen between 0-500
* Highest Density of points in Duration in Minutes and start\_scan\_to\_end\_scan columns were seen in 0-2000.
* Highest desnity in the actual\_distance\_to\_destination, osrm\_distance, segment\_osrm\_distance columns were observed in 0-500 where the highest density was in “Actual Distance”.
* Top three states contributing to the orders are: Maharashtra, Karnataka, Haryana.
* Lowest number of orders are from the following states: Tripura, Mizoram, Nagaland
* There is a total of 867 cities where Delhivery Network is active.
* Highest Destination States: Maharashtra, Karnataka, Haryana
* Lowest Destination States: Tripura, Mizoram, Nagaland
* Around 85 percent of the total distance is covered by the FTL orders whereas Carting is only 15 percent. Similarly, 78% of the total time taken in all deliveries is taken for FTL orders.
* There is a discrepancy in the Average time taken for one delivery and Start and End time provided by the delivery executives.
* There is a difference between the average of the actual time for delivery and the predicted time by OSRM
* The average of both Actual time and Segment Time are equal, which means there is efficiency in the Warehouse Operations.
* There is a gap between the means for distance and time provided by OSRM in respect to Segment and Total values. This makes OSRM inefficient.
* Highest amount of distance and time is consumed in the following states: Maharashtra, Karnataka, Haryana. This is justified as highest number of orders are from the same state.
* Busiest City Corridors: Bangalore-Bangalore, Mumbai-Mumbai
* Most Time-Consuming Corridors: Guwahati-Bhiwandi, Purnia-Muzaffrpur, Bangalore – Chandigarh
* Least Used City Corridors: Karaikal-Cuddalore,Hailakandi-Karimgang.
* It has been observed same state orders contributes highly to the orders.
* Significantly low percentages of orders are inter-state Orders. As, Punjab-Haryana is only 0.0068%, Tamil Nadu – Andhra Pradesh is 0.0068%
* There is a linear relationship between Actual Distance and Start-End Scan time.

Recommendations:

* Delhivery needs to improve on the Carting Orders by promoting the same for business growth.
* As the highest density of orders are within 0-500 bracket, Delhivery should have a better network and bandwidth of transport for much larger order distance. This can help in revenue as well.
* Delhivery is not performing up to the mark in certain areas of the country, they should try and break in the market in states like Tripura, Mizoram, Nagaland by promotions and discounts.
* It has been observed that even though carting has a greater number of orders and FTL is supposed to be faster, Higher amount of time is taken by FTL in completing orders. The organisation needs to make FTL more efficient.
* It has been observed that there is high discrepancy in time and distance given by OSRM. It makes it non reliable. Better data engines should be used for estimation.
* Inter-state and Inter-City deliveries needs to be improved as it is taking higher amount of time.