**Project Overview:**

AtliQ Mart, a fast-moving consumer goods (FMCG) manufacturer based in Gujarat, India, is expanding its operations from three cities to other metros and Tier 1 cities within the next two years. However, the company is facing challenges with its service levels, particularly in terms of on-time and in-full deliveries to key customers. This has resulted in some customers not renewing their contracts due to dissatisfaction with the service.

To address this issue, the supply chain analytics team at AtliQ Mart has initiated a project to measure and improve the on-time and in-full delivery performance. The objective is to track the daily delivery service levels for all customers and identify any deviations from the target service levels. By doing so, the company aims to enhance customer satisfaction, retain key clients, and ensure smooth expansion into new cities.

**Objectives:**

* Measure daily on-time delivery (OT) percentage for all customers.
* Measure daily in-full delivery (IF) percentage for all customers.
* Calculate daily on-time in-full (OTIF) percentage for all customers.
* Set target service levels for each customer based on historical data and industry standards.
* Develop a dashboard to visualize the delivery performance metrics in real-time.
* Identify deviations from the target service levels and take corrective actions promptly.
* Improve overall delivery performance to enhance customer satisfaction and retain key clients.
* Ensure a smooth transition and successful expansion into new cities by addressing service issues proactively.

**Some terms related to the business:**

**Measuring Line Fill Rate & Volume Fill Rate:**

**Line Fill Rate:**

* This metric indicates the percentage of order lines that were successfully fulfilled out of the total lines ordered. It is crucial for the supply planning team to understand their efficiency in meeting customer demands for individual items within an order, irrespective of delivery time.
* **Formula:** (Number of order lines fulfilled / Total number of order lines ordered) \* 100%

**Volume Fill Rate:**

* Similar to Line Fill Rate, Volume Fill Rate measures the total quantity shipped compared to the total quantity ordered by the customer, considering all items within an order. It provides insights into the overall fulfillment efficiency in terms of quantity.
* **Formula:** (Total quantity shipped / Total quantity ordered) \* 100%

**Measuring On-Time Delivery %:**

* This metric is evaluated at the order level and determines whether an order was delivered according to the agreed-upon time with the customer. It is particularly important for the warehouse and distribution team to ensure timely delivery of orders.

**Measuring In-Full Delivery %:**

* Unlike Line Fill Rate, In-Full Delivery % is assessed at the order level and evaluates whether an order was delivered in full as per the requested quantity by the customer. This metric is crucial for the supply planning team to monitor their ability to fulfill orders completely.

**Measuring On-Time In-Full (OTIF) %:**

* OTIF % measures the percentage of orders that were delivered both in full and on time, reflecting the reliability of orders from the customer's perspective. This metric is vital for all sub-functions within the supply chain team to ensure customer satisfaction and operational efficiency.
* An order is considered OTIF only when all the line items inside the order are delivered in full and on time. This metric encapsulates the holistic performance of the supply chain in meeting customer expectations.

**Power Bi live dashboard :** [**Power\_BI dashboard**](https://app.powerbi.com/groups/me/reports/4afa688b-b3fd-4570-8d7a-1c1b8abdee1f/ReportSection?experience=power-bi)