



Codebasics Resume Project Challenge

Generate Insights to Solve a Supply Chain Issue in the FMCG
Domian



Introduction



Fast Moving Consumer Goods (FMCG) refer to products that are sold quickly at relatively low cost. These goods are essential items that people use on a daily or frequent basis, such as food and beverages, personal care products, household cleaning products, and over-the-counter medicines.



AtliQ Mart, an FMCG manufacturer in Gujarat, India, is addressing service issues before expanding to new cities.

Situation

- AtliQ Mart, a growing FMCG manufacturer, is headquartered in Gujarat, India, and currently operates in Surat, Ahmedabad, and Vadodara.
- The company plans to expand to other metros/Tier 1 cities within the next two years.
- However, AtliQ Mart is facing challenges as some key customers have not renewed their annual contracts due to service issues.
- Management suspects that late or incomplete deliveries of essential products have led to poor customer service



TASKS



Task

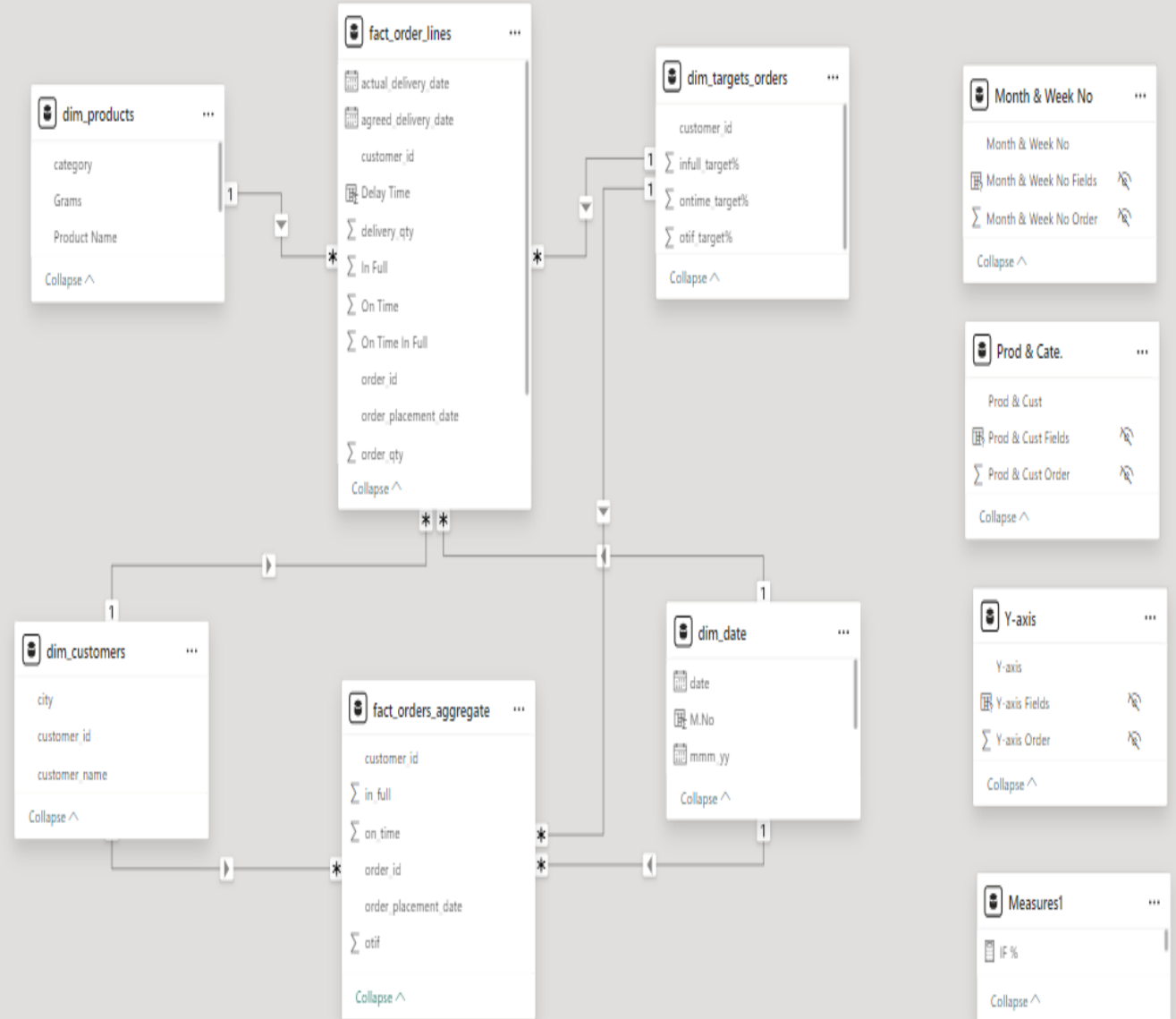
- Peter Pandey, a new data analyst in the supply chain team, has been assigned the task of tracking delivery performance metrics daily.
 - He needs to create metrics including 'On-time delivery (OT) %,' 'In-full delivery (IF) %,' and 'On-Time In-Full (OTIF) %' against set targets for each customer.
 - Additionally, Peter is tasked with developing a dashboard based on stakeholder requirements outlined in the business review meeting.
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Action

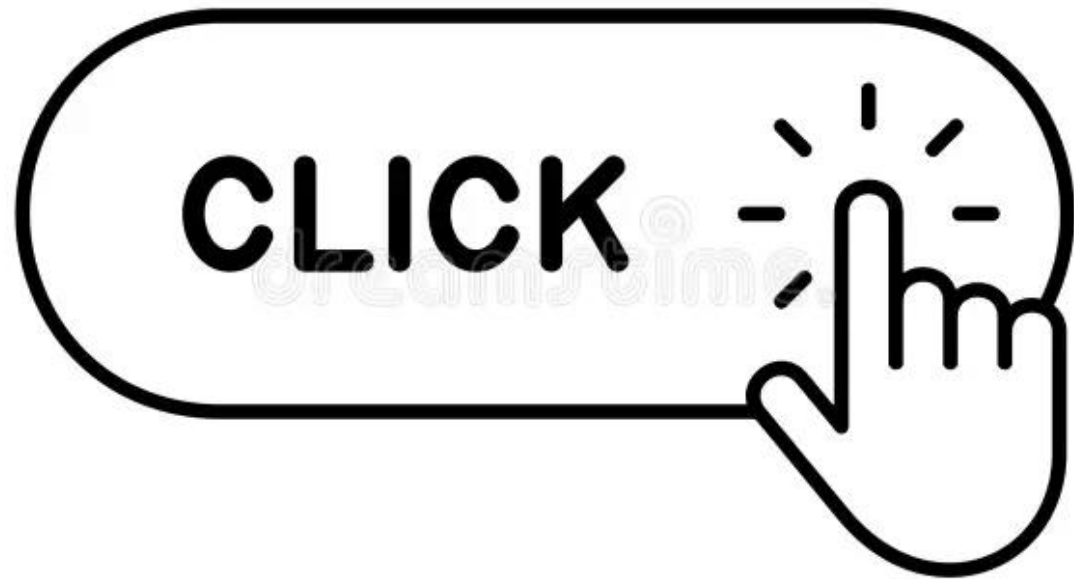
- Peter begins by gathering data on delivery performance, including timestamps for order placement and delivery.
- He calculates the 'On-time delivery (OT) %' by comparing actual delivery times with scheduled delivery times.
- Similarly, Peter computes the 'In-full delivery (IF) %' by comparing the quantity ordered with the quantity delivered.
- To derive the 'On-Time In-Full (OTIF) %,' Peter combines both metrics to measure orders that are delivered on time and in full.
- Using visualization tools like Power BI, Peter designs a dashboard that presents these metrics in an easy-to-understand format.
- He incorporates features for monitoring trends, identifying patterns, and flagging any deviations from target service levels.

Data Modeling

- **Unified View:** Data modeling in Power BI provides a unified view of data from multiple sources, enhancing analysis and decision-making.
- **Efficiency:** It improves efficiency by optimizing query performance, ensuring faster data processing and visualization.
- **Data Integrity:** Data modeling ensures data integrity and consistency, fostering trust in the insights derived from Power BI reports.



Move to
Dashboard



RESULTS

Results

- Key metrics (OT%, IF%, OTIF%) consistently fall below their targets in recent months.
- LIFR% and VOFR% remain relatively stable across all months, indicating consistent performance in these areas.
- Lotus Mart consistently generates the highest number of orders, while Viveks Stores consistently have the lowest order volume.
- The highest quantity of undelivered items was observed in May, totaling 78.39 k units.
- Despite efforts, there's been no observable improvement in key metrics recently.
- AM Milk Product stands out with both the highest order volume and the highest delay time.

**Thank
You**

