SUPPLY CHAIN PROJECT ANALYSIS

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Introduction

The project revolves around improving delivery service levels for AtliQ Mart, an FMCG manufacturer headquartered in Gujarat, India. Facing challenges with on-time and in-full deliveries to key customers, the company aims to rectify service issues before expanding to new cities. By measuring metrics like Line Fill Rate, Volume Fill Rate, On-Time Delivery Percentage, In-Full Delivery Percentage, and On-Time In-Full Percentage, the supply chain team seeks to enhance customer satisfaction, retain clients, and ensure a smooth transition into new markets.



Project goals and objectives:

The project at AtliQ Mart revolves around a pivotal goal: to elevate the standards of delivery service. This initiative is not merely about meeting the needs of customers but about exceeding expectations to retain existing clients and pave the way for business expansion. By meticulously measuring, analyzing, and enhancing delivery performance, the company aims to fortify its position in the fast-moving consumer goods (FMCG) sector. At the heart of this endeavor lies a commitment to customer satisfaction, achieved through proactive monitoring and swift corrective actions. Through a combination of targeted metrics and a culture of continuous improvement, AtliQ Mart endeavors to establish itself as a beacon of reliability and efficiency in the industry, driving sustainable growth and competitive advantage.

Business Terms:



Line Fill Rate:

This metric indicates the percentage of order lines that were successfully fulfilled out of the total lines ordered.



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.

Business Terms:

OT%

This metric is evaluated at the order level and determines whether an order was delivered according to the agreed-upon time with the customer.

IF%

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. OTIF%

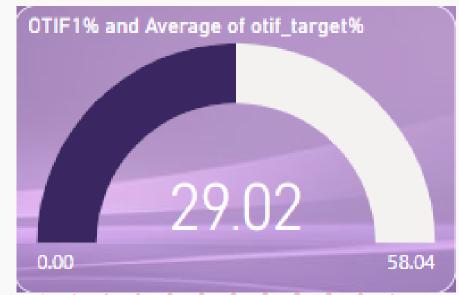
OTIF % measures the percentage of orders that were delivered both in full and on time, reflecting the reliability of orders from the customer's perspective.



ANALYSIS







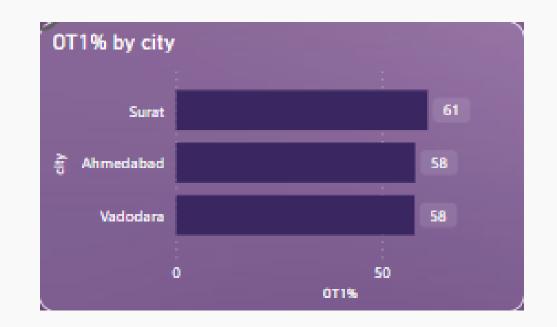
The data shows us that, we got 32,000 Total orders for the given period of time, but out of it, only 19,000 were delivered on time, 17,000 were delivered in full and only 9,000 were delivered On time-in full both, the OTIF is too less compared to the number of total orders, which could be the main concern of unsatisfied customer experience.

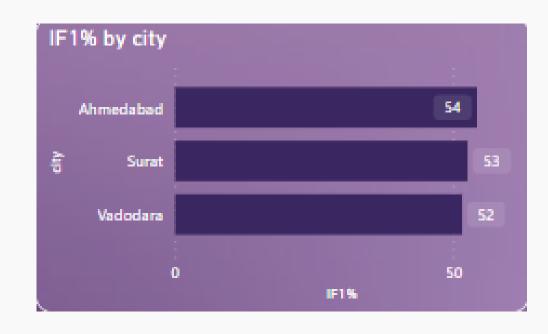
The donut chart gives us the idea of the average target and the current rate of fulfillment, which shows that, the fulfillment rate of OTIF, OT and IF are behind the target.

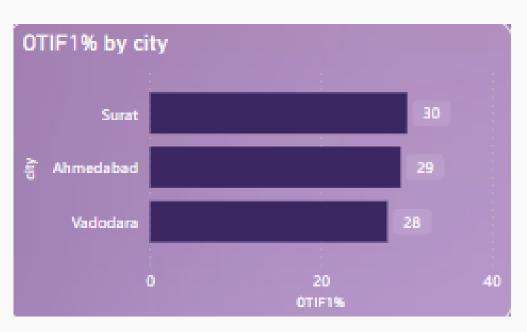


This bar graph shows the number of customers and the %GT of the total Orders received from them.









Segregating the OT, OTIF and IF percentage we can see that SURAT gets fulfilled the most OT, and OTIF, while it remains at 2nd position in IF chart, it still remains the city that is fulfilled the most.

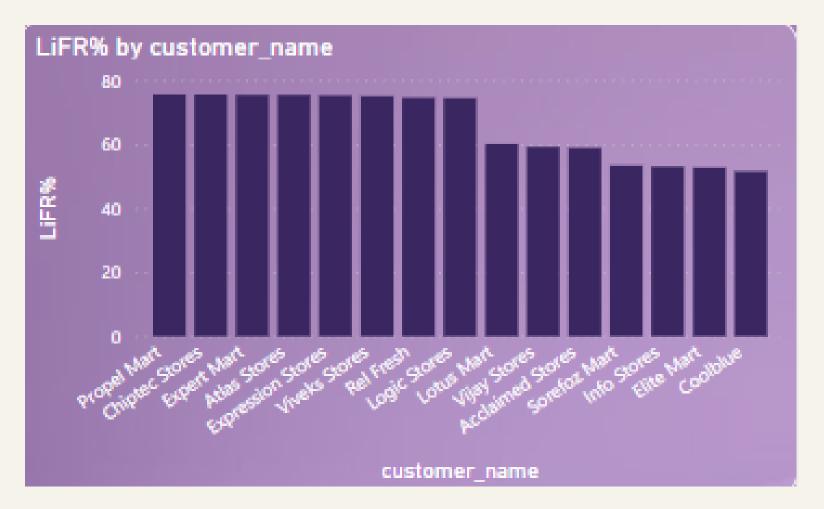
57K
TotalOrderLine

38K
TOLFullyFilled

65.96
LiFR%

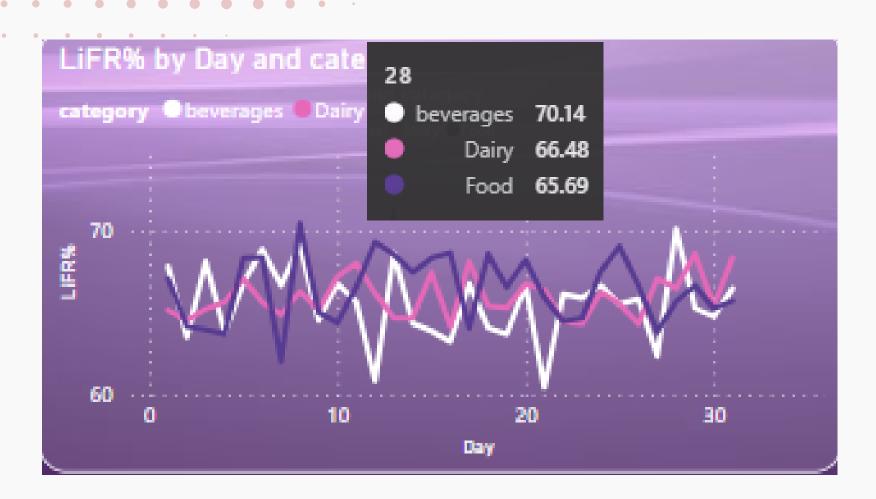
13M
TotalQTY
TotalQTYDelivered

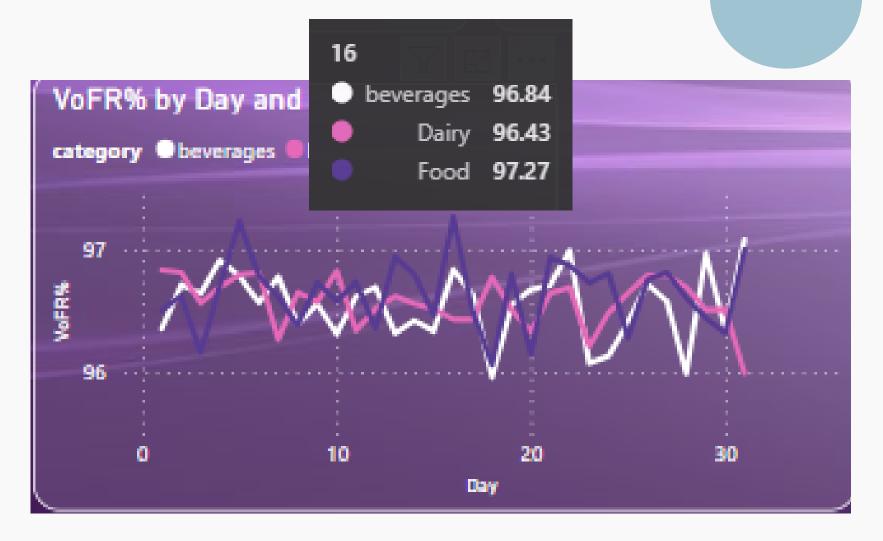
96.59
VoFR%



The data provides that, if the total Order line is 57,000, only 38,000 is fulfilled, which gives 65.96% LIFR% and similarly, if the volumn is I3M and the total Quantity rounded up is I3m, which gives 96.58& VOFR& rate.

The bar graph is a representation of customers vs LIFR%.





The graph represents the lifr% and vofr% on daily basis over the months, it is separated in the basis of category, such as beverages, dairy and food.

Food		
66.43	96.64	
LiFR%	VoFR%	
Dairy		
65.95	96.59	
LiFR%	VoFR%	
beverages		-1
65.54	96.54	
LiFR%	VoFR%	

In tabular format, the LIFR and VOFR percentages for different product categories are provided. Food has the highest LIFR at 66.43% and VOFR at 96.64%, followed by Dairy and Beverages. However, all categories exhibit relatively similar fulfillment rates, suggesting consistent performance across product types.

CONCLUSION

- The low OTIF rate highlights a critical area for improvement to enhance overall customer satisfaction.
- Addressing the fulfillment rate disparities between cities could help ensure a more consistent customer experience.
- While the VOFR is high, indicating efficient fulfillment in terms of volume, attention should be given to improving the LIFR to ensure all individual order lines are fulfilled accurately and on time.
- Despite differences in product categories, overall fulfillment rates remain relatively consistent, suggesting a need for holistic improvement strategies rather than category-specific interventions.

THANKYOU