



About AtliQ Mart

AtliQ Mart is a growing FMCG manufacturer headquartered in Gujarat, India. It is currently operational in three cities Surat, Ahmedabad and Vadodara. They want to expand to other metros/Tier 1 cities in the next 2 years.

AtliQ Mart is currently facing a problem where a few key customers did not extend their annual contracts due to service issues. It is speculated that some of the essential products were either not delivered on time or not delivered in full over a continued period, which could have resulted in bad customer service. Management wants to fix this issue before expanding to other cities and requested their supply chain analytics team to track the 'On time' and 'In Full' delivery service level for all the customers daily basis so that they can respond swiftly to these issues.

The Supply Chain team decided to use a standard approach to measure the service level in which they will measure 'On-time delivery (OT) %', 'In-full delivery (IF) %', and OnTime in full (OTIF) %' of the customer orders daily basis against the target service level set for each customer.

Task

Metrics need to be created :

- Total Order Lines – A customer can request multiple items, and each of these items within the order is called an order line.
- Line Fill Rate (LIFR%) – Line Fill Rate is a metric that measures the percentage of order lines fulfilled from the total number of order lines.
- Volume Fill Rate (VOFR%) – Volume Fill Rate (VOFR %) is the percentage of product demand that is successfully fulfilled within a specific time frame.
- Total Orders – Total number of orders
- On Time Delivery % (OT%) – (OT %) is a key performance indicator that measures the percentage of orders or deliveries that are completed on time as promised.
- In Full Delivery% (IF%) – (IF %) is a key performance metric that measures the percentage of orders or deliveries that are fulfilled completely without any missing or back-ordered items.
- On Time In Full% (OTIF%) – (OTIF %) is a metric that measures the percentage of orders or deliveries that are fulfilled both on time and in full.
- On Time Target – On-Time Target refers to the specified or expected delivery time that a business or organization aims to achieve for its products or services.
- In Full Target – In-Full Target refers to the specific goal or benchmark set by a business or organization regarding the completeness of deliveries.
- On Time In Full Target – On-Time In-Full (OTIF) Target represents the specific objective or benchmark set by a business or organization for the punctuality and completeness of deliveries.



AtliQ Mart - Supply Chain Analysis

3/1/2022

8/30/2022

About

To Insights

Reset All

Ahmedabad

Surat

Vadodara

Total Orders

31.73K

Total Order Lines

57.10K

OT %

59.03%

IF %

52.78%

OTIF %

29.02%

OT Target

86.09%

IF Target

76.51%

OTIF Target

65.91%

LIFR %

65.96%

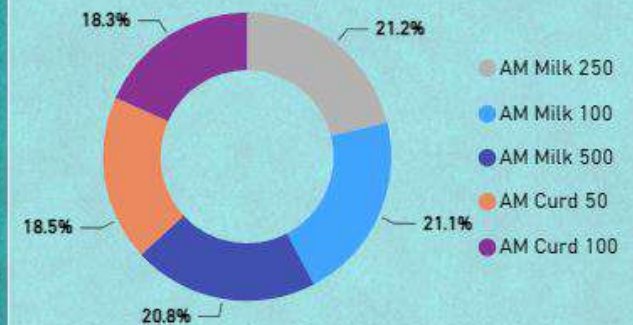
VOFR %

96.59%

Product Insights

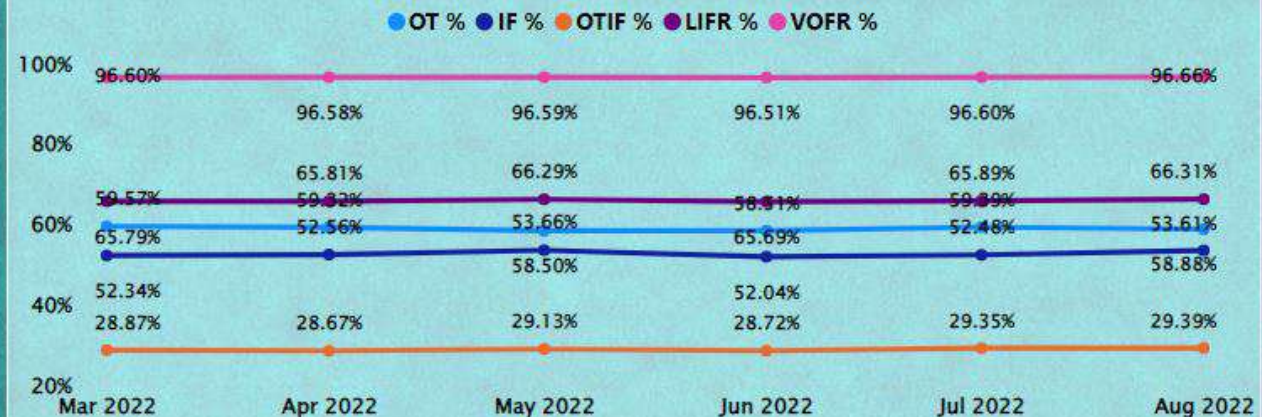
customer_name	beverages	Dairy	Food	Total
Logic Stores	67255.00	592694.00	95886.00	755835.00
Chiptec Stores	65261.00	595017.00	96374.00	756652.00
Viveks Stores	65779.00	602286.00	92235.00	760300.00
Atlas Stores	64854.00	594446.00	101411.00	760711.00
Sorefoz Mart	72194.00	603553.00	89789.00	765536.00
Info Stores	68855.00	605047.00	93931.00	767833.00
Expression Stores	70878.00	602417.00	95451.00	768746.00
Elite Mart	68721.00	606597.00	96822.00	772140.00
Coolblue	67626.00	610508.00	98490.00	776624.00
Expert Mart	68147.00	620036.00	101515.00	789698.00
Acclaimed Stores	102499.00	877869.00	139722.00	1120090.00
Propel Mart	99281.00	899930.00	144552.00	1143763.00
Total	1183744.00	10564711.00	1678481.00	13426936.00

Top 5 Products By Order



Customer Insights

customer_name	order_qty	OT %	IF %	OTIF %	LIFR %	VOFR %
Acclaimed Stores	1.12M	29.43%	52.36%	15.47%	58.93%	95.85%
Atlas Stores	0.76M	71.81%	59.78%	39.55%	75.48%	97.58%
Chiptec Stores	0.76M	71.62%	60.35%	38.73%	75.61%	97.58%
Coolblue	0.78M	29.13%	44.73%	13.75%	51.53%	95.08%
Elite Mart	0.77M	72.45%	37.94%	24.37%	52.74%	95.29%
Expert Mart	0.79M	72.54%	59.81%	39.11%	75.48%	97.44%
Expression Stores	0.77M	69.92%	60.83%	38.39%	75.28%	97.54%
Info Stores	0.77M	70.94%	41.16%	25.52%	53.05%	95.24%
Logic Stores	0.76M	70.82%	60.14%	38.78%	74.39%	97.45%
Lotus Mart	1.16M	28.11%	53.35%	16.34%	60.08%	96.01%
Total	13.43M	59.03%	52.78%	29.02%	65.96%	96.59%



(LIFR% - Line Fill Rate %) (VOFR% - Volume Fill Rate%) (OT% - On time Delivery) (IF% - In Full Delivery%) (OTIF% - On Time In Full %)



Problem Statement

- – **Issue Identification:** Key customers didn't renew annual contracts, possibly due to service problems.
- – **Root Cause Speculation:** Essential products might not have been delivered on time or in full over an extended period.
- – **Management's Concern:** To address service issues before expanding to other cities.
- – **Analytical Approach:** The supply chain analytics team will track the following service level metrics on a daily basis:
 - – On-time Delivery (OT) %
 - – In-full Delivery (IF) %
 - – On Time in Full (OTIF) %
- – **Purpose:** Swiftly respond to issues by measuring the daily performance against the target service level set for each customer.

Insights

- – We received a total of 31.73K orders, consisting of 57.10K order lines. The overall quantity, involving multiple products, reached 13.43 million.
- – LIFR % is 65.96% and VOFR % is 96.59%
- – We have not achieved our OT, IF, and OTIF targets.
- – Our OT% is 59.03%, falling short of the target of 86.09%.
- – Similarly, our IF% is 52.78%, below the target of 76.51%.
- – The OTIF% is 29.02%, missing the target of 65.91%. Therefore, none of these targets have been met.

Steps and Suggestion to improve the performance and target

Enhance Operational Efficiency:

Streamline processes for quicker order fulfillment, Invest in technology to automate tasks and reduce errors.

Boost Employee Training:

Provide comprehensive training to staff, Ensure everyone is well-versed in the fulfillment process.

Implement Inventory Optimization:

Regularly review and adjust inventory levels, Utilize forecasting tools to anticipate demand accurately.

Strengthen Communication Channels:

open communication between teams, Address any communication gaps promptly.

Customer Feedback and Satisfaction:

Collect and analyze customer feedback, Make improvements based on customer suggestions.

Regular Monitoring of Metrics:

Continuously monitor key performance indicators, Identify trends and areas for improvement.

Collaborative Approach:

Encourage collaboration between different departments, Ensure everyone understands their role in the fulfillment process.

Evaluate Technology Solutions:

Explore advanced technologies for order tracking and management, Consider tools that can integrate seamlessly with existing systems.

Seek Professional Guidance:

Consult with industry experts or specialists, Obtain insights on best practices and industry benchmarks.

Remember, improvement is an ongoing process. Regularly assess performance, gather feedback, and adapt strategies accordingly.