Supply Chain Metrics Analysis for AtliQ Mart

Improving Customer Retention and Service Levels

By: Yogesh Jain   **January 1st, 2025**

BUSINESS PROBLEM:

AtliQ Mart faces challenges with customer satisfaction, leading to non-renewals of contracts by key customers.

Objective:

Use supply chain data to:

- Identify underperforming areas.
- Compare actual performance to targets.
- Propose actionable insights to improve metrics like OT%, IF%, OTIF%, LIFR%, and VOFR%

Insights on Delivery Performance and Recommendations for Improvement

Row Labels	OT%	OT Target %	OT Gap %
Lotus Mart	28.11%	77.33%	63.65%
Coolblue	29.13%	77.00%	62.16%
Acclaimed Stores	29.43%	76.33%	61.45%
Info Stores	70.94%	92.00%	22.89%
Expression Stores	69.92%	88.50%	21.00%
Viveks Stores	70.61%	89.00%	20.67%
Elite Mart	72.45%	91.00%	20.39%
Expert Mart	72.54%	91.00%	20.28%
Chiptec Stores	71.62%	89.00%	19.53%
Logic Stores	70.82%	87.50%	19.06%
Vijay Stores	72.45%	89.33%	18.90%
Atlas Stores	71.81%	88.00%	18.40%
Rel Fresh	72.32%	88.00%	17.81%
Sorefoz Mart	72.67%	87.00%	16.47%
Propel Mart	73.64%	86.67%	15.03%
Grand Total	**59.03%**	**86.09%**	**31.43%**

1) On-Time Delivery (OT%)

We're falling behind on delivering orders on time. Acclaimed Stores, Cool Blue, and Lotus Mark are seeing more than **60% of their orders delayed**, which is a serious issue. Even for other customers, the performance isn't great, with delays averaging out to a **31.43% failure rate**.

How to Improve:

- **Get Ahead with Better Scheduling:** Use smarter tools to predict order demand and plan deliveries more efficiently.
- **Streamline Delivery Routes:** Work with logistics partners to ensure timely deliveries and optimize routes to cut delays.
- **Prioritize Key Customers:** Assign special attention to customers like Acclaimed Stores and Cool Blue to make sure they get their orders on time.

Row Labels	IF%	IF Target %	IF Gap %
Elite Mart	37.94%	73.00%	48.03%
Sorefoz Mart	39.19%	72.00%	45.56%
Info Stores	41.16%	71.00%	42.02%
Vijay Stores	44.98%	76.00%	40.82%
Coolblue	44.73%	71.00%	37.00%
Acclaimed Stores	52.36%	75.33%	30.49%
Lotus Mart	53.35%	75.33%	29.18%
Rel Fresh	58.69%	79.33%	26.02%
Viveks Stores	60.07%	81.00%	25.84%
Chiptec Stores	60.35%	81.00%	25.49%
Expert Mart	59.81%	80.00%	25.24%
Propel Mart	59.74%	79.33%	24.70%
Atlas Stores	59.78%	78.00%	23.36%
Expression Stores	60.83%	78.00%	22.01%
Logic Stores	60.14%	76.00%	20.86%
Grand Total	**52.78%**	**76.51%**	**31.02%**

2) In-Full Delivery (IF%)

We're struggling to send complete orders. Elite Mart has been the hardest hit, with **48% of orders missing items**. Customers like Info Stores, Sorefoz Mart, and Vijay Stores are also seeing more than **40% of their orders incomplete**, and the average failure rate across all customers is **31.02%**.

How to Improve:

- **Keep Stock Levels Healthy:** Use inventory management techniques like Just-In-Time (JIT) or safety stock to ensure we always have what's needed.
- **Review Supply Chains:** Identify bottlenecks in the supply process and resolve them quickly to avoid partial shipments.
- **Communicate Clearly:** Let customers know if there's a delay in fulfilling their orders fully and set realistic expectations.

Row Labels	OTIF%	OTIF Target %	OTIF Gap %
Coolblue	13.75%	54.50%	74.78%
Acclaimed Stores	15.47%	57.67%	73.17%
Lotus Mart	16.34%	58.00%	71.83%
Elite Mart	24.37%	66.50%	63.35%
Info Stores	25.52%	65.50%	61.03%
Sorefoz Mart	25.89%	62.50%	58.58%
Vijay Stores	28.28%	68.00%	58.41%
Expert Mart	39.11%	73.00%	46.43%
Chiptec Stores	38.73%	72.00%	46.20%
Viveks Stores	39.44%	72.50%	45.60%
Rel Fresh	38.18%	69.67%	45.20%
Expression Stores	38.39%	69.00%	44.37%
Atlas Stores	39.55%	68.50%	42.26%
Logic Stores	38.78%	66.50%	41.68%
Propel Mart	40.92%	68.67%	40.40%
Grand Total	**29.02%**	**65.91%**	**55.97%**

3) On-Time In-Full Delivery (OTIF%)

This is where we're facing the biggest challenges. Acclaimed Stores, Cool Blue, and Lotus Mark have more than **70% failure rates** for receiving products On Time and In Full. Overall, our OTIF% failure rate is a worrying **55.97%**.

How to Improve:

- **Work Smarter, Not Harder:** Use analytics to track why orders are incomplete or delayed and focus on fixing those areas.
- **Prioritize High-Risk Customers:** Take immediate action to improve service for customers like Acclaimed Stores and Cool Blue. Losing them would be a big blow.
- **Get Teams on the Same Page:** Make sure your operations, inventory, and logistics teams are working together seamlessly to meet OTIF% targets.

Row Labels	VoFR%	LiFR%
Acclaimed Stores	95.85%	58.93%
Atlas Stores	97.58%	75.48%
Chiptec Stores	97.58%	75.61%
Coolblue	95.08%	51.53%
Elite Mart	95.29%	52.74%
Expert Mart	97.44%	75.48%
Expression Stores	97.54%	75.28%
Info Stores	95.24%	53.05%
Logic Stores	97.45%	74.39%
Lotus Mart	96.01%	60.08%
Propel Mart	97.70%	75.62%
Rel Fresh	97.43%	74.54%
Sorefoz Mart	95.33%	53.40%
Vijay Stores	95.87%	59.23%
Viveks Stores	97.57%	75.06%
Grand Total	**96.59%**	**65.96%**

4) LiFR (Linefill Rate):

- **Industry Expectations**: A **good LiFR** is typically considered around **90-95%** or higher, depending on the industry. Achieving **65.96%** (the average across all stores) is considered low. Ideally, stores should aim to fill a higher percentage of their orders with the correct quantity to meet customer expectations and avoid issues like stockouts or customer dissatisfaction.

    Why it's low:

    - A **65.96% LiFR** indicates that over **1/3 of orders** are not being filled correctly, which could cause delivery delays, customer complaints, or lost sales. This rate should be improved to better serve customers.

5) VoFR (Vendor On-Time and Full Rate):

- **Industry Expectations**: **VoFR** should ideally be above **95-98%** for strong vendor performance, meaning almost all orders should be delivered both on time and with the correct quantities. A **VoFR of 96.59%** (average across all stores) is actually **good**, but there is still **room for improvement**. While it's above the 95% threshold, aiming for near-perfect performance would be ideal.

    Why it's okay, but could be better:

    - **96.59%** means that about **3-4% of orders** may still have issues with either timing or completeness. This can result in some delays or customers receiving incomplete orders, which is not optimal for customer satisfaction.

Is this normal?

- **No, the LiFR is below expectations**, and improvements are needed.
- **The VoFR is decent**, but it can still be optimized to reach near-perfect levels.

What can be done?

- **For LiFR**: Focus on better inventory management, improving demand forecasting, and optimizing the supply chain to ensure more accurate order fulfillment.
- **For VoFR**: Strengthen vendor relationships and communication to ensure that deliveries are both on time and in full.

In summary, while the **VoFR** is acceptable, the **LiFR** is lower than expected and requires significant improvement to meet industry standards and customer expectations.