

# **Case Study: Atliq Mart Supply Chain Analysis**

Name: Md Sahil

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## **Introduction:**

Our case study is based on a FMCG manufacturer Atliq Mart which is 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.

## **About the Company:**

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.

## **PHASE 1: Asking the right question and Identifying business task**

### **Stakeholders:**

1. Bruce Haryali (**Director, Atliq Mart**)
2. Tony Sharma (**Head of Supply chain, Atliq Mart**)

### **Goal:**

1. Describe 'On time', 'In full' and 'OTIF %' with respect to their targets in the metrics and also split by Customer, City.
2. understand the customer's service level visually over all these metrics with respect to our target.
3. Insight of Products according to Key Metrics specially by LIFR% and VOFR%.
4. Trend of Key Metrics and respective targets through time.

## **PHASE 2: Preparing the Data**

### **Data source:**

Data is given by CodeBasic.

### **Data details:**

Data is given by CodeBasic in csv format. There are 6 csv file.

Metadata described in the following given link:

[https://github.com/mdsahilmca20/PortfolioProjects/blob/main/CodeBasic/Atlig%20Mart%20Supply%20Chain%20Analysis/meta\\_data.txt](https://github.com/mdsahilmca20/PortfolioProjects/blob/main/CodeBasic/Atlig%20Mart%20Supply%20Chain%20Analysis/meta_data.txt)

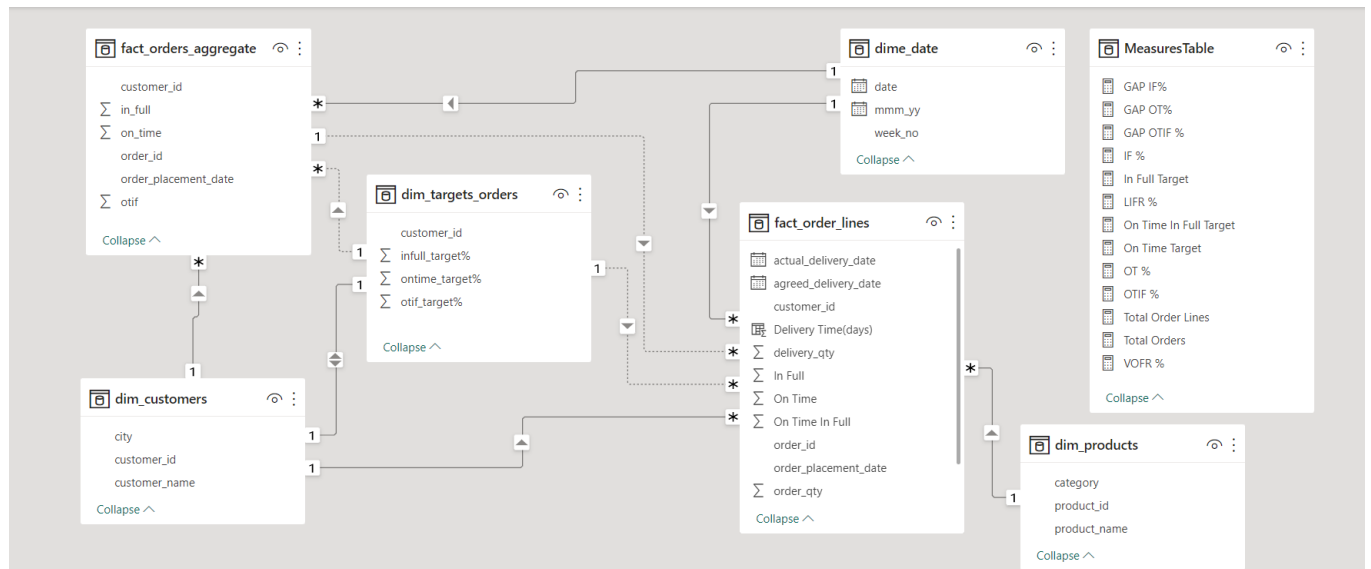
Key metrics details given below:

Measures	Abbreviation
Total Order Lines	
Line Fill Rate	LIFR %
Volume Fill Rate	VOFR %
Total Orders	
On Time Delivery %	OT %
In Full Delivery %	IF %
On Time In Full %	OTIF %
On Time Target	
In Full Target	
On Time In Full Target	

## **PHASE 3 & 4: Process and Analyzing the Data**

First Loaded the raw data into PowerBI, then do data cleaning in Power Query Editor. After that creating Calculating measures and calculated columns in PowerBI in order to create Key Metrics and calculation.

After transforming the raw data to a single table our data model is given below:



## **PHASE 5 & 6: Visualizations and Act**

I used PowerBI to run further analysis and generate visualizations that support the key findings in the analysis.

**For full visualization and key findings follow the link:**

<https://www.novypro.com/project/atliq-mart-supply-chain-analysis>