

Atliq Supply Chain Analysis



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Objective

The goal of the project is to track 'On time' and 'In Full' delivery service level for all the customers so that they can investment in certain segment to improve overall customer service as well as reach out to new customers in other cities.

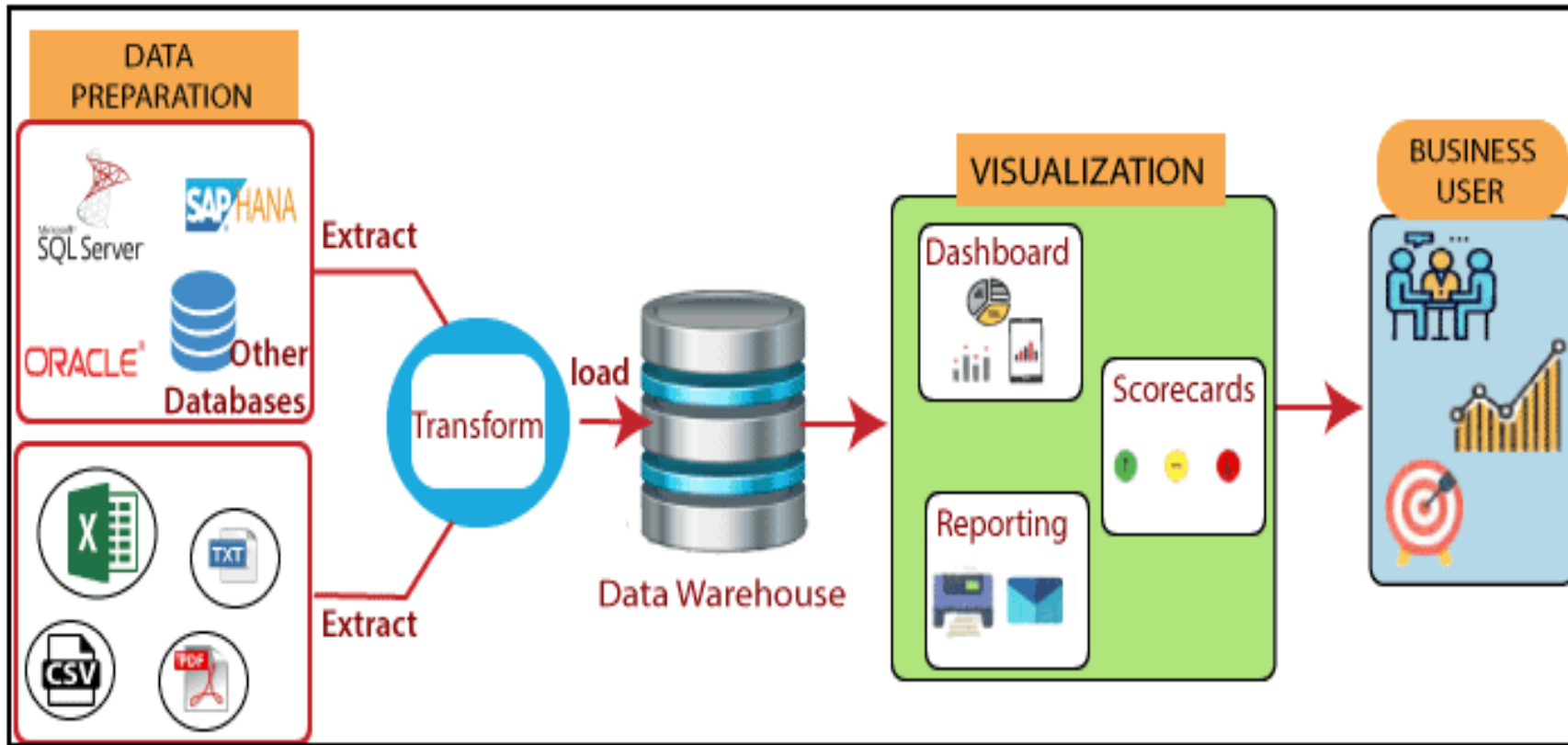
Problem Statement

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 metro/tier1 cities in the next 2 years.

Atliq Mart is currently facing a problem where a few key customers did not extend the annual contract 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.

Power-Bi Architecture

POWER BI ARCHITECTURE



Dataset Information

- ▶ Csv file name Dim_Customers which contains details about the customer like city name, customer-id and lastly customer-name.
- ▶ Csv file name Dim_Products which contains details about the products like category name, product-id and lastly product-name.
- ▶ Csv file name Dim_Targets_Orders which contains details about the target data at the customer level like customer-id, ontime-target%, infull-target% and lastly ontime-infull(otif)-target%.
- ▶ Csv file name Fact_Order_Lines which contains details about the about orders and each item inside the orders like order-id, order placement date, product-id ,order-quantity ,agreed-delivery date, actual delivery data, customer-id and lastly delivered-quantity.
- ▶ Csv file name Fact_Orders_Aggregate which contains details OnTime, InFull and OnTime Infull information aggregated at the order level per customer like order-id, order-placement-date, customer-id, ontime('1' delivered on time & '0' delivered not in time), infull('1' quantity order delivered in full & '0' not delivered in full) and lastly otif ('1' denotes the order is delivered both on time and in full quantity. '0' denotes the order is either not delivered on time or not in full quantity.
- ▶ VOFR-> Volume Fill Rate(The % of customer orders able to meet without running out of stock.)
- ▶ LIFR-> Line Fill Rate(The % of order lines completely filled out of the total number of order lines.)

Insights

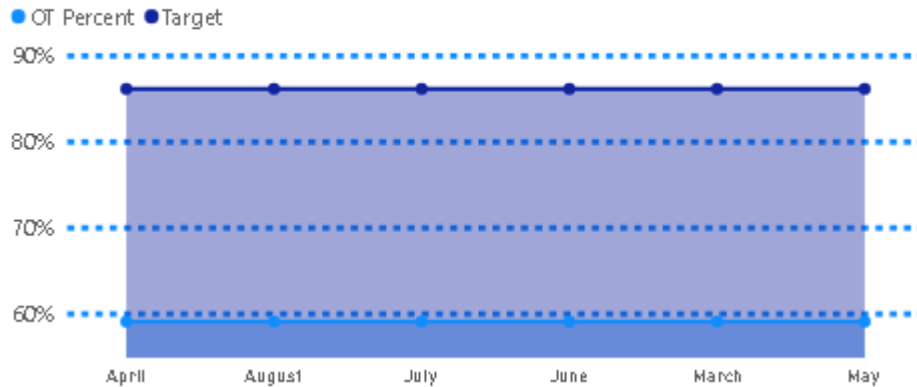
Overall Order	Overall Delivered	VORF Percent	LIFR Percent
13.43M	12.97M	96.59%	65.96%
OT PERCENT	IF PERCENT	OTIF PERCENT	
59.03%!	52.78%!	29.02%!	
Target: 86.09% (-31.43%) 2022	Target: 76.51% (-31.02%) 2022	Target: 65.91% (-55.97%) 2022	

- ▶ At **52.78%**, IF% is currently 23.73% away from the target of **76.51%**.
- ▶ At **59.03%**, OT% is currently 27.05% away from the target of **86.09%**.
- ▶ At **29.02%**, OTIF is currently 36.89% away from the target of **65.91%**.
- ▶ Total Quantity ordered and total quantity delivered, differ by **0.43 M (4.3 Lakh)**

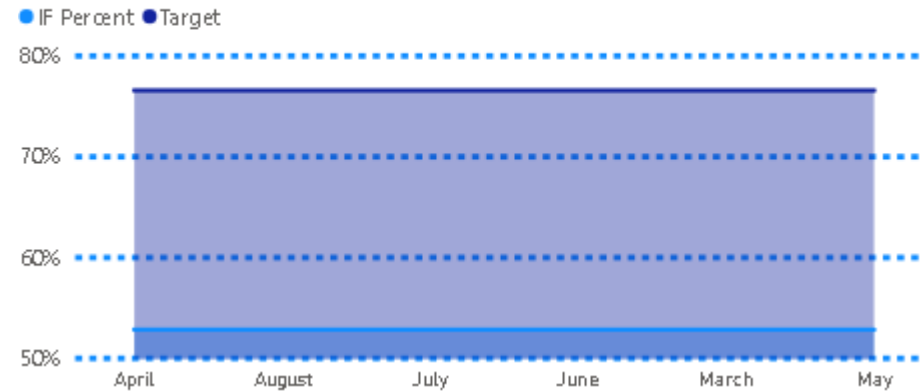
city	OT_Percent	Target_OnTime	OTIF_Percent	Target_OnTime_InFull	IF_Percent	Target_Infull
Ahmedabad	58.2%	86%	29.3%	66.50%	54.2%	77.33%
Surat	61.2%	86%	30.1%	66.36%	52.5%	76.91%
Vadodara	58.0%	86%	27.8%	64.92%	51.6%	75.33%
Total	59.0%	86%	29.0%	65.91%	52.8%	76.51%

City wise all are equally distant from the projected target irrespective of parameters.

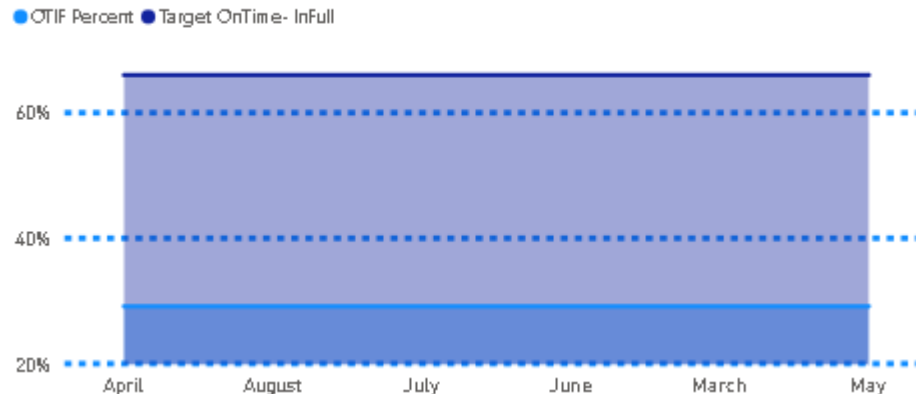
OT Percent and Target by Month Name



IF Percent and Target Month Name

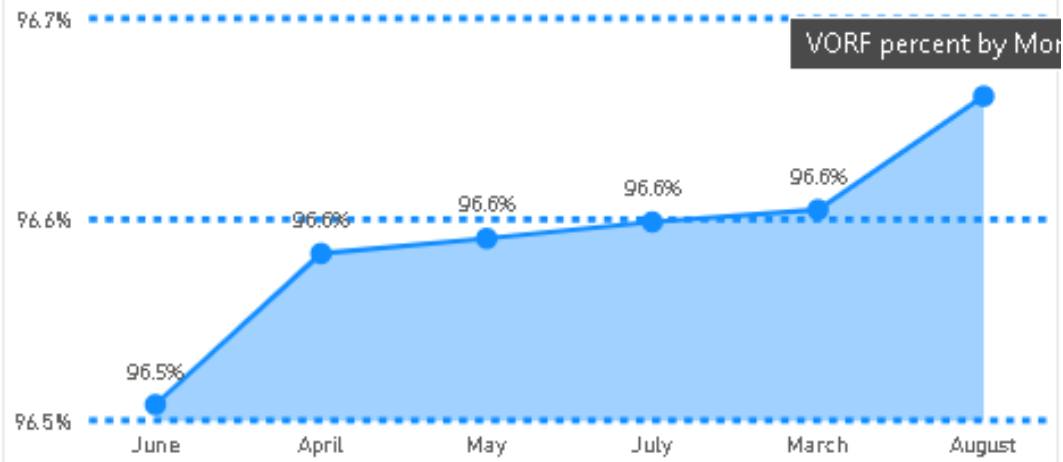


OTIF Percent and Target OnTime - InFull by Month Name

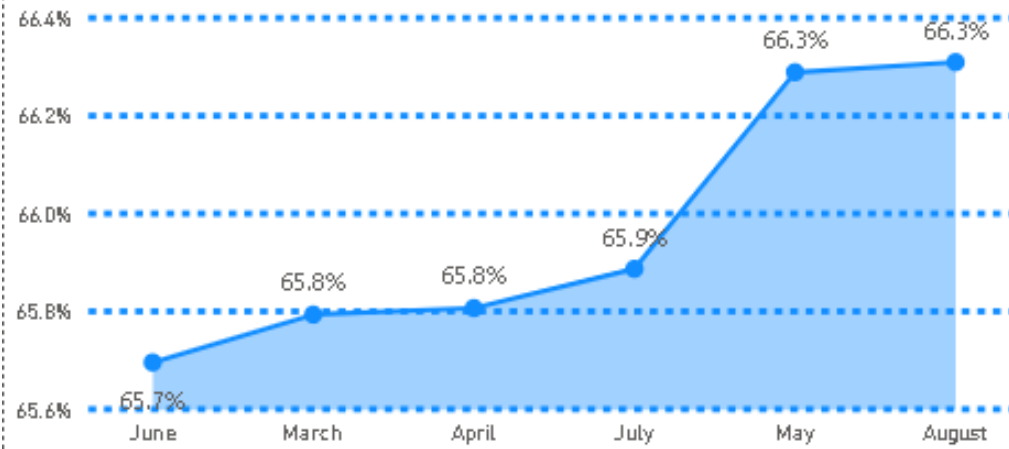


From all the above figure we see that there is such improvement in any month irrespective of parameters.

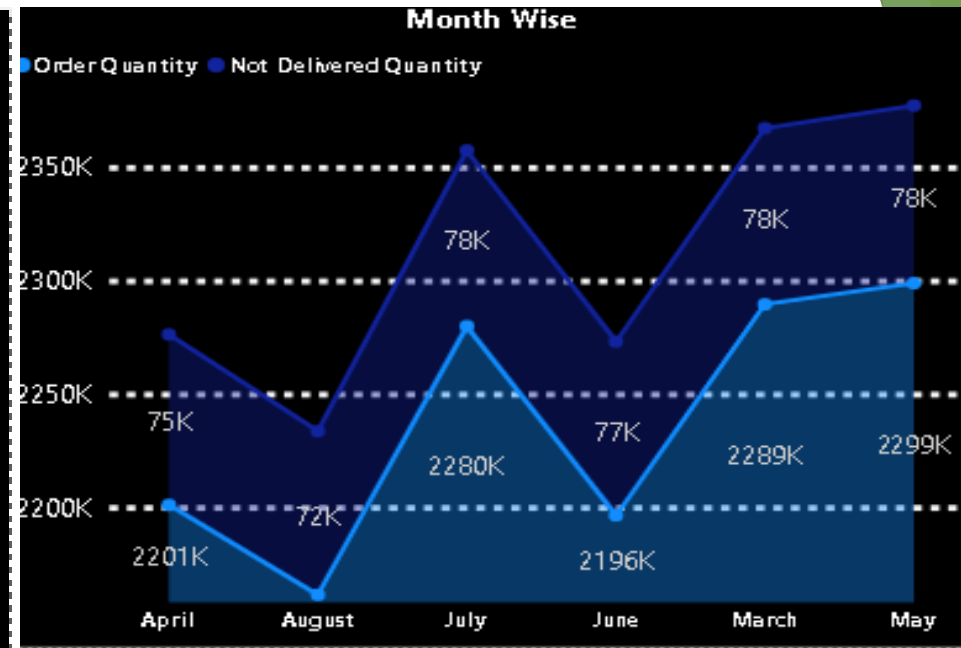
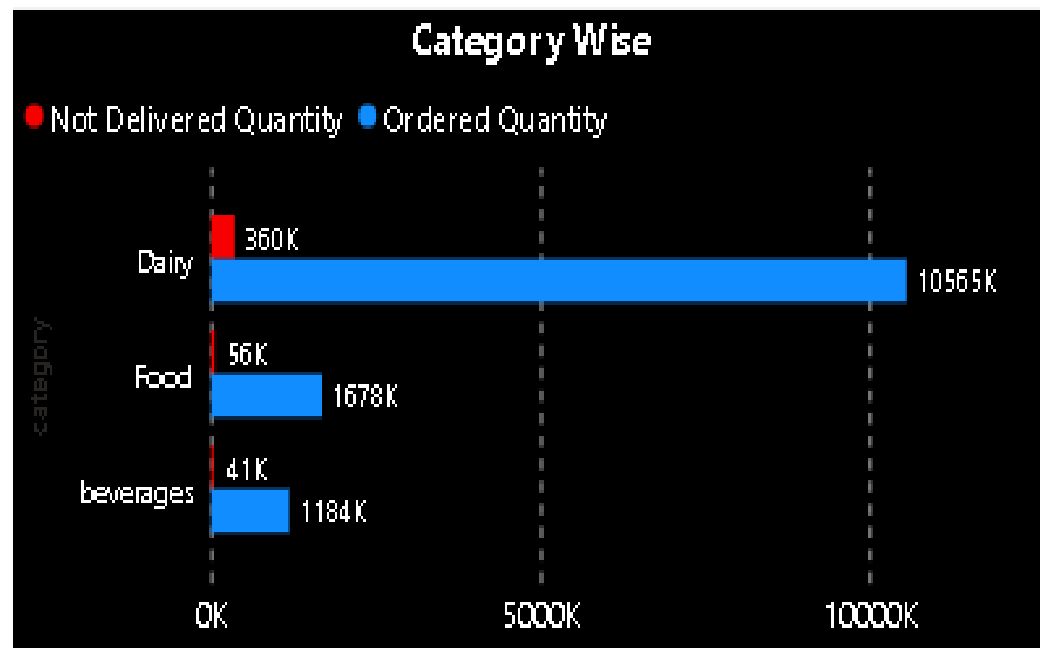
VORF percent by Month Name



LIFR Percent by Month Name



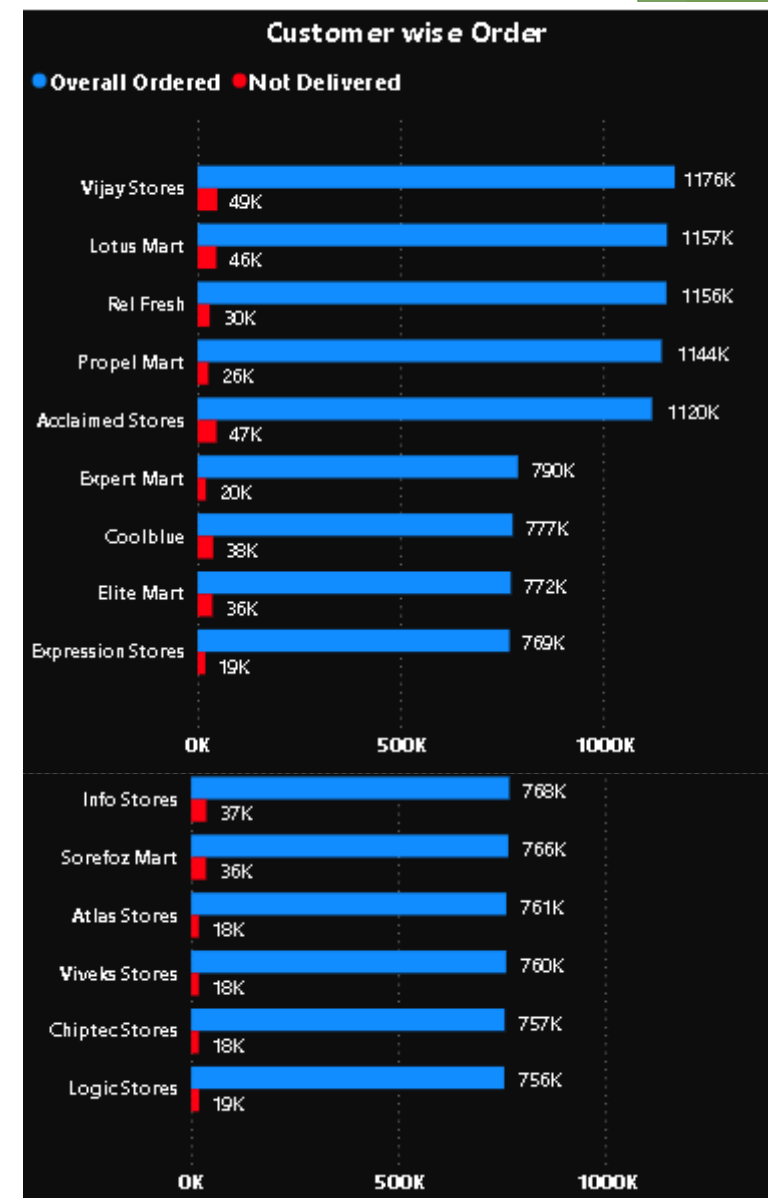
- ▶ We got (VOFR)volume fill rate and (LIFR)line fill rate percentage on the month basis.
- ▶ We are able to meet customer orders without running out of stock which is denoted as VOFR on the respective months with overall 96% that is good sign.
- ▶ But the some how order lines completely filled out of the total number of order lines is less which is denoted as LIFR on the respective months with overall considering 65% which indeed need attention for improvement.



- ▶ We got category wise most ordered quantity as well as most undelivered quantity and Overall ordered and Not delivered the month basis.
- ▶ We are able to see that customer orders mostly the dairy products then comes the Food products and lastly the beverages , in the similar way of category order in the case of not quantity undelivered
- ▶ We are able to see we received highest order in the month of may then in march while lowest order received in the month of august then june .
- ▶ We are also able to see highest undelivered order is in the months of july, march and may while lowest in month of august then april

Customer	OTIF Percent ▲	OT Percent	IF Percent	LIFR Percent	VORF Percent
Coolblue	↓ 13.7%	29.1%	44.7%	51.5%	95.1%
Acclaimed Stores	↓ 15.5%	29.4%	52.4%	58.9%	95.8%
Lotus Mart	↓ 16.3%	28.1%	53.4%	60.1%	96.0%
Elite Mart	24.4%	72.4%	37.9%	52.7%	95.3%
Info Stores	25.5%	70.9%	41.2%	53.1%	95.2%
Sorefoz Mart	25.9%	72.7%	39.2%	53.4%	95.3%
Vijay Stores	28.3%	72.4%	45.0%	59.2%	95.9%
Rel Fresh	38.2%	72.3%	58.7%	74.5%	97.4%
Expression Stores	38.4%	69.9%	60.8%	75.3%	97.5%
Chiptec Stores	38.7%	71.6%	60.4%	75.6%	97.6%
Logic Stores	38.8%	70.8%	60.1%	74.4%	97.5%
Expert Mart	39.1%	72.5%	59.8%	75.5%	97.4%
Viveks Stores	39.4%	70.6%	60.1%	75.1%	97.6%
Atlas Stores	39.6%	71.8%	59.8%	75.5%	97.6%
Total	29.0%	59.0%	52.8%	66.0%	96.6%

- We can see that 3 customers i.e. 'Coolblue', 'Acclaimed Stores' and 'Lotus Mart', need attention as they have horrible OTIF% as well as OT% .
- We can see highest order placed by 'Vijay Stores' , 'Lotus Mart' and 'Rel Fresh' , while order quantity from 'Chiptec Stores' and 'Logic Stores' is less as compared to highest ordering customers.



THANK YOU