

## **Project Title** - Generate Insights to Solve a Supply Chain Issue in FMCG Domain

### **Problem Statement:**

- GDS 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.
- Problem: GDS Mart is facing issues with on-time and in-full deliveries, impacting customer contracts.
- Suspected reasons: Late delivery, not delivering in full.

### **Objective:**

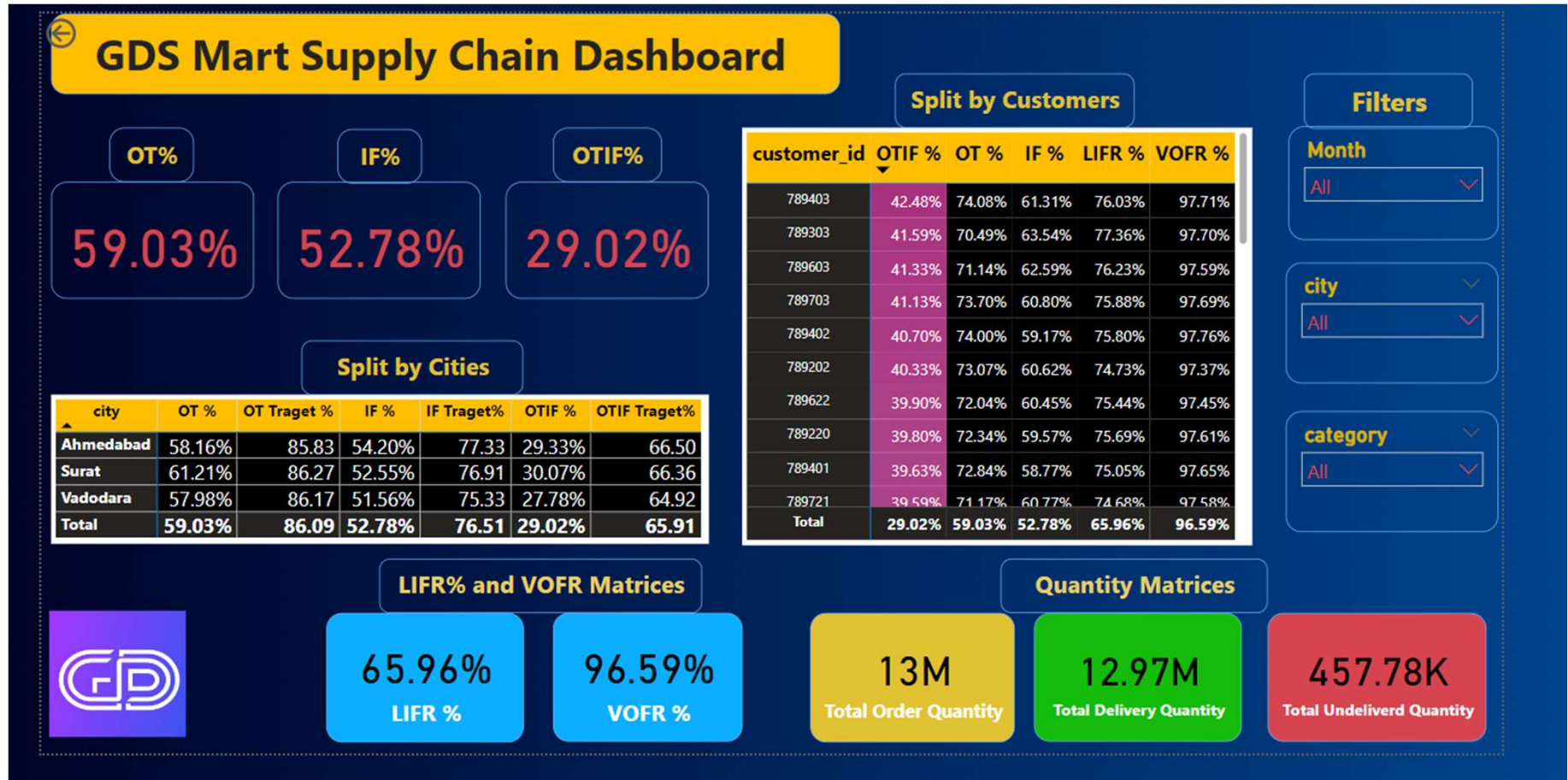
Develop a system to measure 'On-time Delivery (OT) %,' 'In-full Delivery (IF) %,' and 'On-Time in Full (OTIF) %' for customer orders daily against target service levels.

**Team Name** - Analyst Aces

### **Team Members**

- Ram Narayan Tiwari
- Aradhana Jit

## Dashboard Overview



Filters

Month

All

city

All

category

All

LIFR% and VOFR Matrices

65.96%

LIFR %

96.59%

VOFR %

Quantity Matrices

13M

Total Order Quantity

12.97M

Total Delivery Quantity

457.78K

Total Undelivered Quantity





## GDS Mart Supply Chain Dashboard



### Products Insights

product_name	LIFR %	VOFR %	LIFR % by Month	VOFR % by Month
AM Tea 500	66.14%	96.52%		
AM Tea 250	65.16%	96.52%		
AM Tea 100	65.32%	96.59%		
AM Milk 500	67.51%	96.71%		
AM Milk 250	65.91%	96.61%		
AM Milk 100	65.55%	96.54%		
AM Ghee 250	65.25%	96.53%		
AM Ghee 150	66.72%	96.69%		
AM Ghee 100	65.75%	96.59%		
AM Curd 50	65.55%	96.62%		
AM Curd 250	67.05%	96.72%		
AM Curd 100	66.73%	96.62%		
AM Butter 500	65.19%	96.46%		
AM Butter 250	63.52%	96.36%		
AM Butter 100	66.66%	96.59%		
AM Biscuits 750	68.05%	96.85%		
AM Biscuits 500	66.10%	96.49%		
AM Biscuits 250	65.16%	96.58%		
Total	65.96%	96.59%		

### Total Order by Month and City



### Filters

#### city

- ☐ Ahmedabad
- ☐ Surat
- ☐ Vadodara

#### category

- ☐ beverages
- ☐ Dairy
- ☐ Food

#### Day

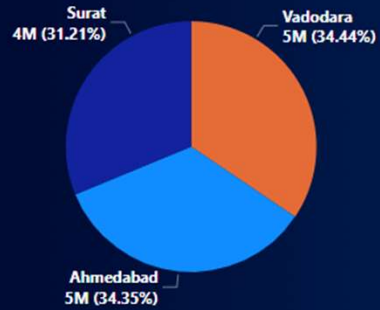
All



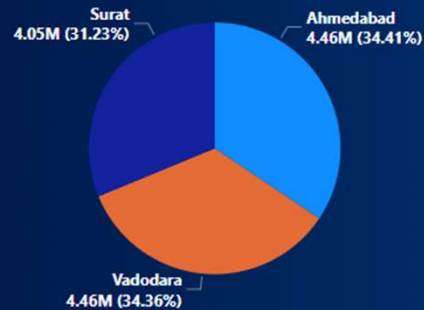
## GDS Mart Supply Chain Dashboard



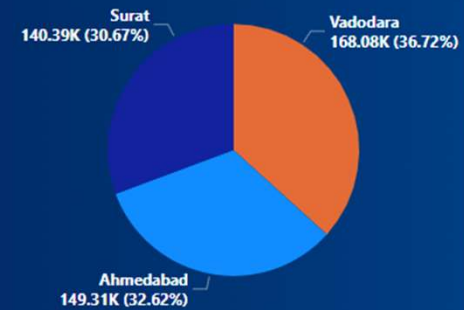
### City by Orders



### City by delivered Order



### City by Undelivered Order



### Filters

category

beverages

Diary

Food

### Filters

product\_name

All

### Filters

date

All



## GDS Mart Supply Chain Dashboard



### product\_name

- ☐ AM Biscuits 250
- ☐ AM Biscuits 500
- ☐ AM Biscuits 750
- ☐ AM Butter 100
- ☐ AM Butter 250
- ☐ AM Butter 500
- ☐ AM Curd 100
- ☐ AM Curd 250
- ☐ AM Curd 50
- ☐ AM Ghee 100
- ☐ AM Ghee 150
- ☐ AM Ghee 250
- ☐ AM Milk 100
- ☐ AM Milk 250
- ☐ AM Milk 500
- ☐ AM Tea 100
- ☐ AM Tea 250
- ☐ AM Tea 500

customer_name	Total Order Quantity	Total Delivery Quantity	Total Undelivered Quantity	LIFR %	VOFR %	IF %	IF Target%	OT %	OT Target %	OTIF %	OTIF Target%
Viveks Stores	760300	741805	18495.00	75.06%	97.57%	60.07%	81.00	70.61%	89.00	39.44%	72.50
Vijay Stores	1176293	1127743	48550.00	59.23%	95.87%	44.98%	76.00	72.45%	89.33	28.28%	68.00
Sorefoz Mart	765536	729757	35779.00	53.40%	95.33%	39.19%	72.00	72.67%	87.00	25.89%	62.50
Rel Fresh	1155598	1125869	29729.00	74.54%	97.43%	58.69%	79.33	72.32%	88.00	38.18%	69.67
Propel Mart	1143763	1117512	26251.00	75.62%	97.70%	59.74%	79.33	73.64%	86.67	40.92%	68.67
Lotus Mart	1157117	1110955	46162.00	60.08%	96.01%	53.35%	75.33	28.11%	77.33	16.34%	58.00
Logic Stores	755835	736562	19273.00	74.39%	97.45%	60.14%	76.00	70.82%	87.50	38.78%	66.50
Info Stores	767833	731262	36571.00	53.05%	95.24%	41.16%	71.00	70.94%	92.00	25.52%	65.50
Expression Stores	768746	749837	18909.00	75.28%	97.54%	60.83%	78.00	69.92%	88.50	38.39%	69.00
Expert Mart	789698	769463	20235.00	75.48%	97.44%	59.81%	80.00	72.54%	91.00	39.11%	73.00
Total	13426936	12969157	457779.00	65.96%	96.59%	52.78%	76.51	59.03%	86.09	29.02%	65.91

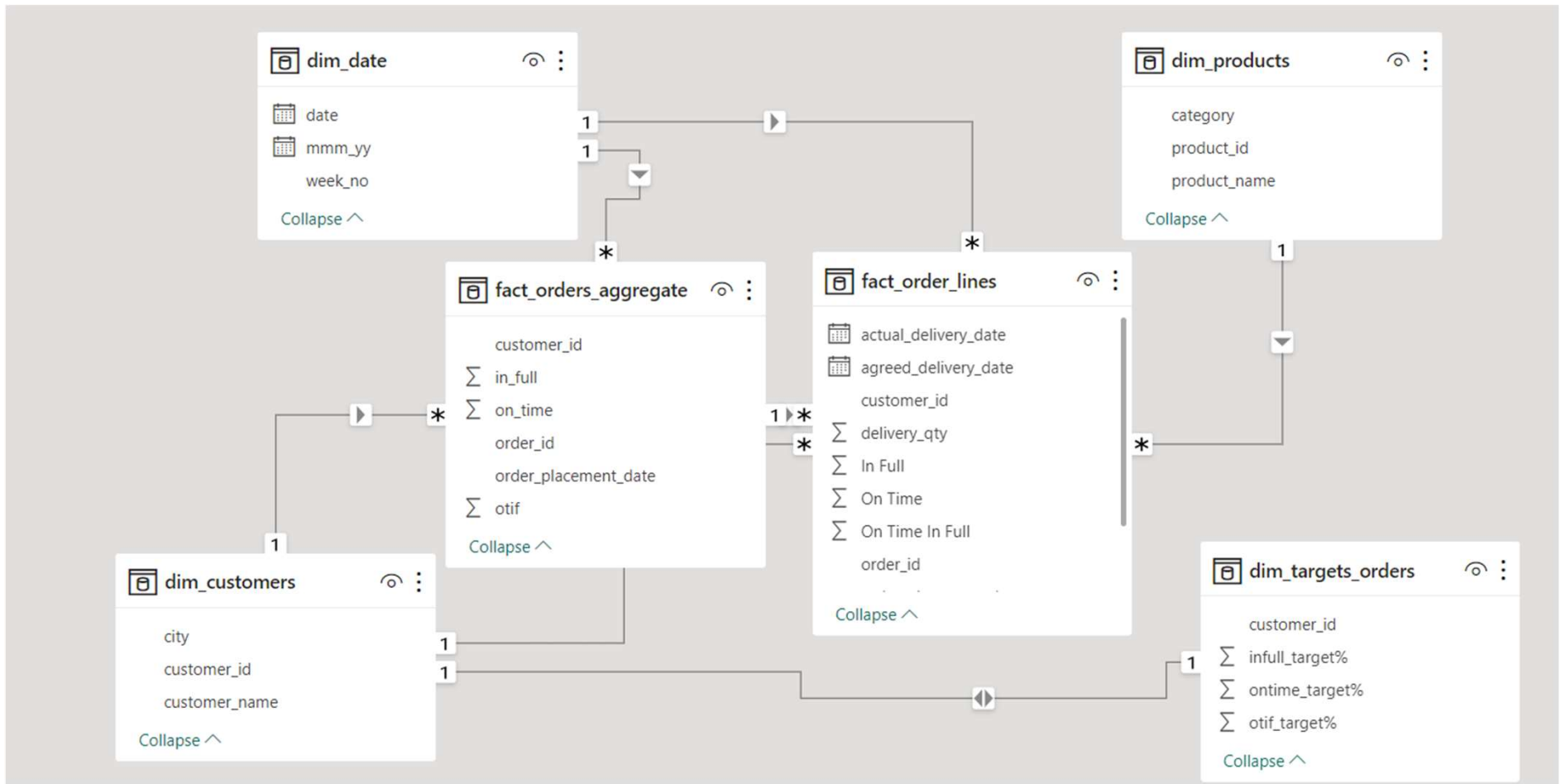
### category

- ☐ beverages
- ☐ Dairy
- ☐ Food

### city

- ☐ Ahmedabad
- ☐ Surat
- ☐ Vadodara

# Model





## **Dashboard Overview:-**

- Major key metrics tracked include OT%, IF%, OTIF%, LIFR (Line Fill Rate), and VOFR (Volume Fill Rate).- DAX formulas are used for these metrics
- The dashboard shows the percentage of all these metrics.
- Quantity matrices are also calculated.
- Data is presented with splits by cities, highlighting OT%, IF%, and OTIF%
- Slicers are used for Month, Day, and Category filters.
- The Product Insight table presents LIFR and VOFR percentages based on product name and months.
- Line charts display total orders by month and city, with slicers for city, category, and day columns.
- Pie charts depict city by orders, city by delivered orders, and city by undelivered orders.
- Slicers are used for category, product\_name, and date columns.

### **Some Major Insights:**

- All the Key Metrics (OT%, IF%, OTIF%) are far behind the target
- Surat has fewer orders and delivered orders than other cities, but Vadodara has more undelivered Orders.
- On an average, orders are delayed 0.42 days from the agreed date of delivery.
- Highest orders are coming in Ahmedabad City
- Ghee, curd and butter products are most delayed to deliver.
- There is no noticeable improvements in any of the key metrics in the last few months
- There is a huge gap in IF% for most of the customers. Is it because of less production?