Inventory Analysis With details report

using Power BI

By Abhinandan Das

Inventory Overview

Inventory Overview | Sales Overview

Year: All | Quarter: All | State: All | Regio: All

199
No of Stores

101K
Inventory Unit

706.21K
Inventory value

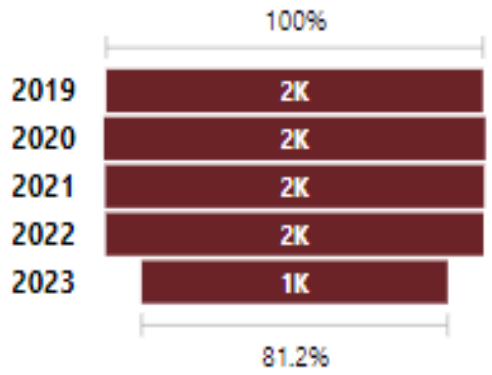
1905
Present Inventory

183.54
Inventory Turnover

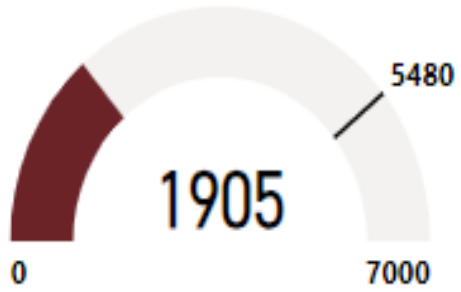
3575
Under stock Qty

1.94M
Re-stocking Cost

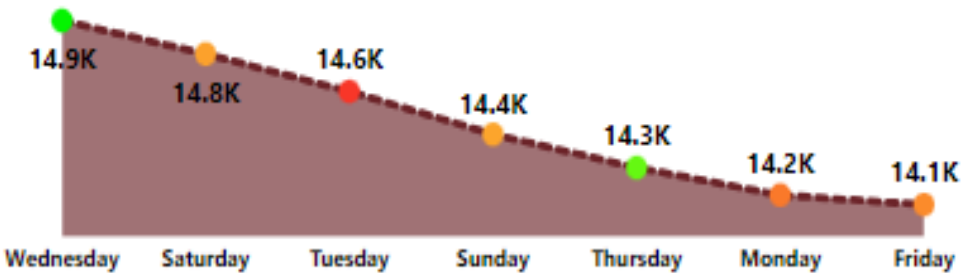
Year Wise Inventory



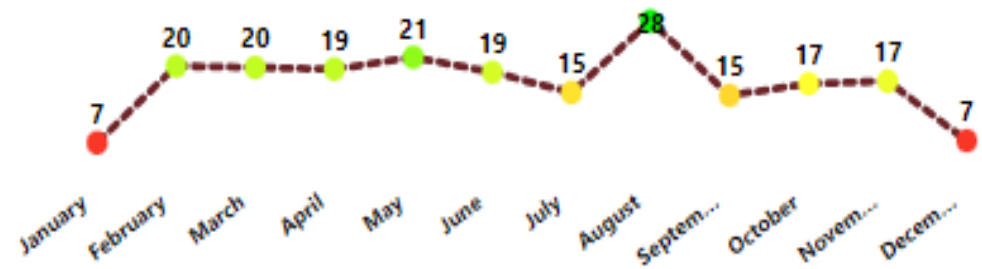
Target Vs Present Inventory



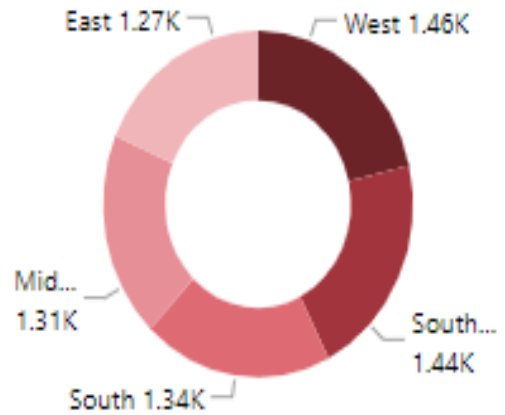
Daily Inventory Trend



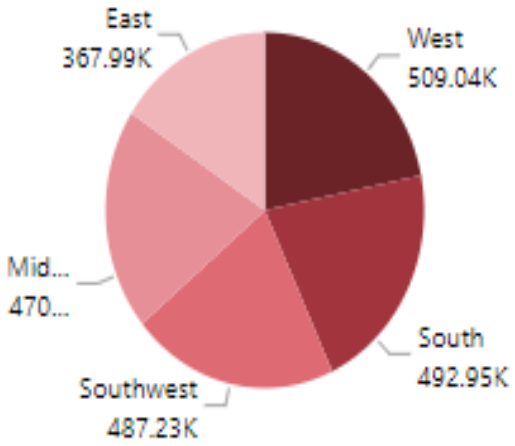
Monthly Inventory Turnover



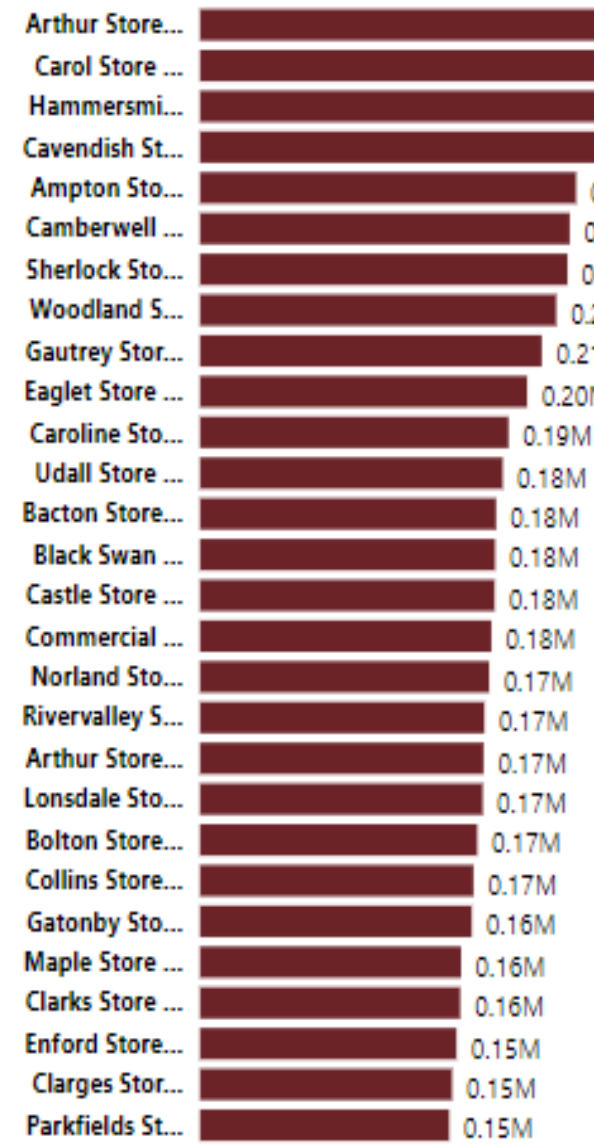
Inventory unit by Store Region



Inventory value by Store Region



Inventory value by Store Name



Arthur Store #438

Store Name

Inventory Details

2502

Inventory Unit

270.99K

Inventory value

1022

Present Inventory

8.31

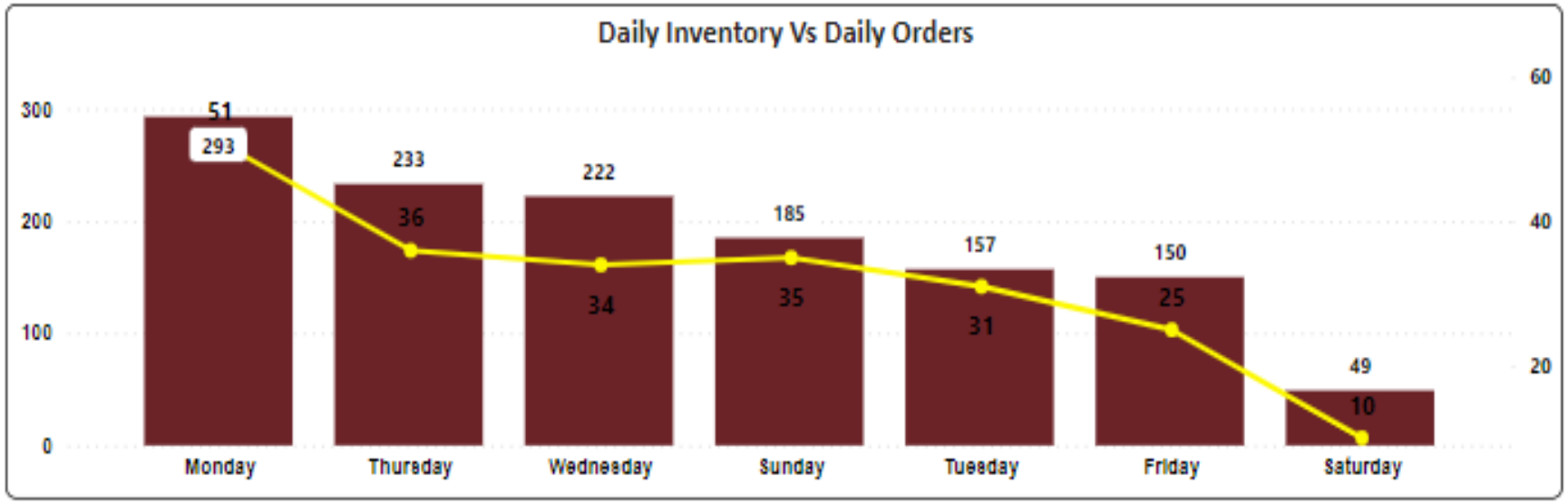
nventory Turnover

1428

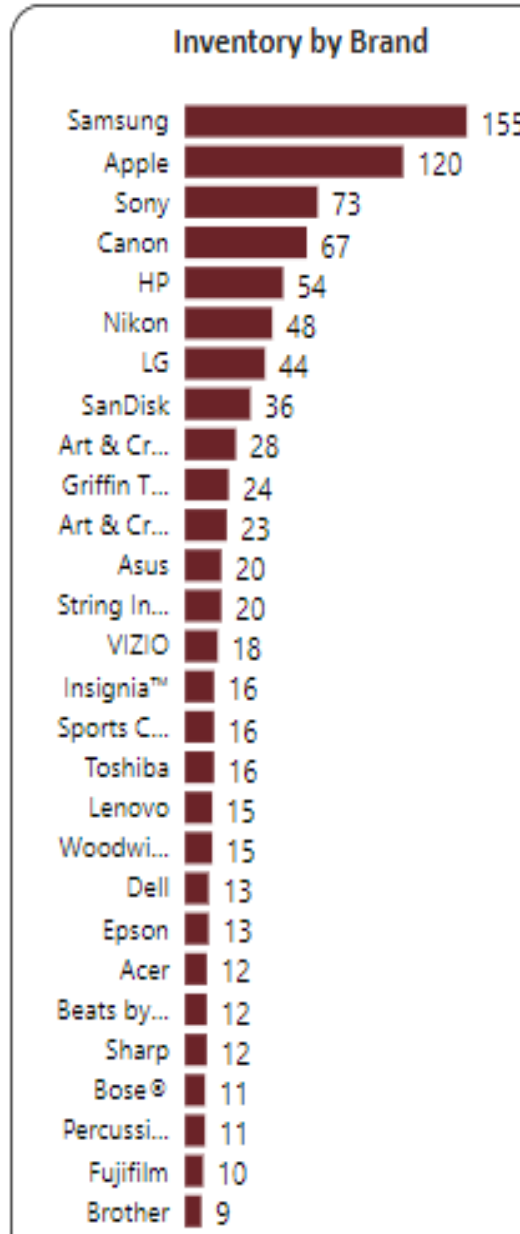
Under stock Qty

524.49K

Re-stocking Cost



Product Name	Product In Inventory	Under stock	Over Stock	Out of Stock	Expected cost For Upcomming Re-sto
1002-Beer Pong Tables	1	4	0	0	3,420.00
1007-Brass Instrument Cleaners & Sanitizers	1	4	0	0	1,068.00
1008-Brass Instrument Cleaning Tools	2	3	0	0	360.00
1011-Brass Instrument Polishing Cloths	3	2	0	0	1,080.00
1012-Brayer Rollers	2	3	0	0	849.00
1014-Capos	2	3	0	0	345.00
1020-Clarinet Parts	1	4	0	0	1,068.00
1021-Clarinet Pegs & Stands	1	4	0	0	1,068.00
1022-Clarinet Reeds	2	3	0	0	517.50
1023-Clarinet Straps &	3	2	0	0	230.00



Sales Overview

Inventory Overview | Sales Overview

Year: All | Quarter: All | State: All | Region: All

101K
No of Orders

19.19M
Total S

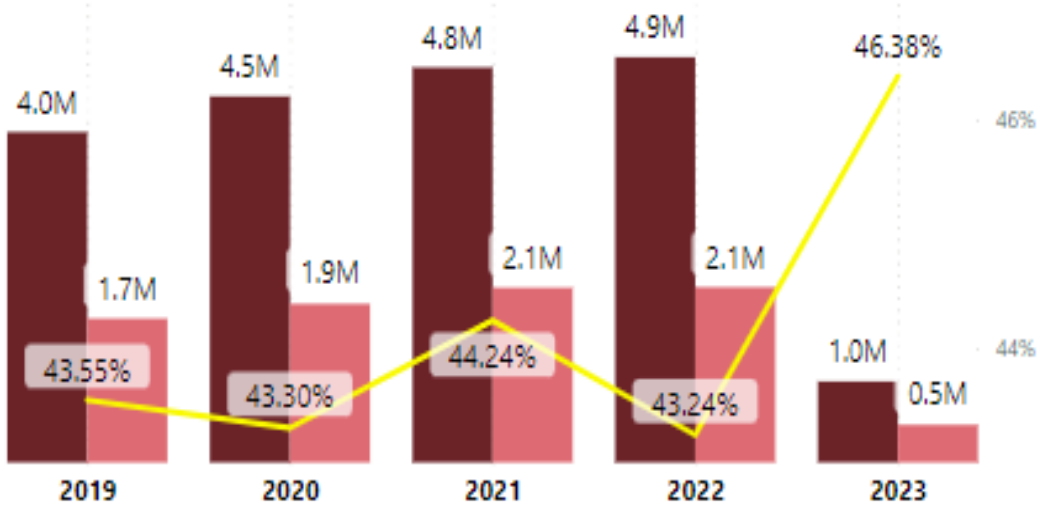
8.39M
Total Profit

43.73%
Profit margin %

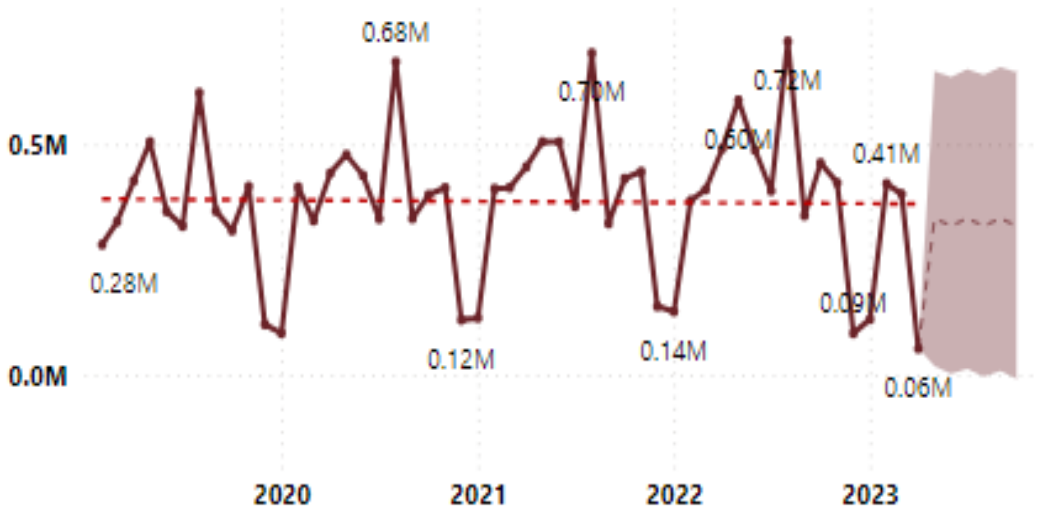
5.41%
YoY Growth %

984.72K
YTD Sales

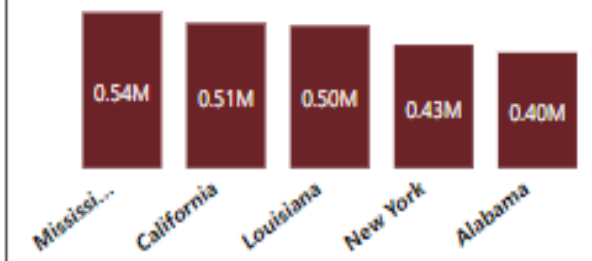
Total Sales, Total Profit and Profit margin % by Year



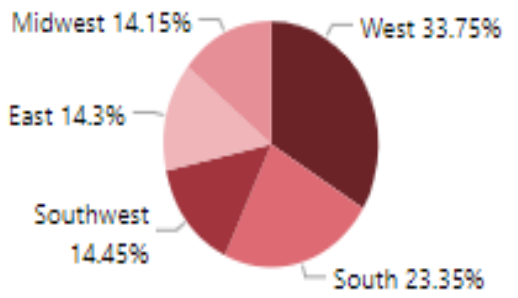
Monthly Sales Trends with 6 month forecast



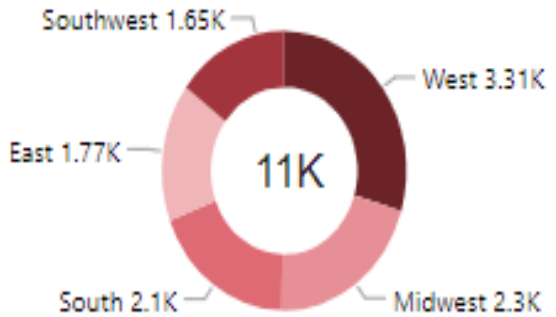
Sales By Top 5 State



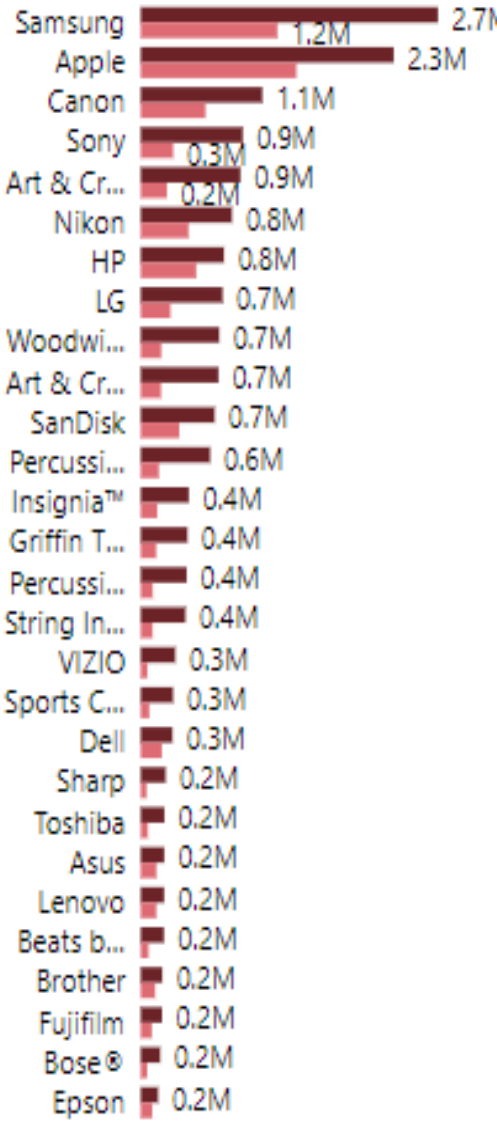
Region Wise Sales



Unique orders by Region



Sales and Profit by Product Brand



Sales Details

Samsung
Brand Name

14K
No of Orders

2.69M
Total Sales

1.24M
Total Profit

45.96%
Profit margin %

5.38%
YoY Growth %

Year: All | Quarter: All | State: All | Region: All

Product Name	Total Cost	Total Sales	Total Profit	Profit margin %
13-65" Class (64.5" Diag.) LED Curved	5,009.38	6012	1,002.62	16.68%
456-48" Class (47.6" Diag.) LED 1080p	641.48	776	134.52	17.33%
10-60" Class (60" Diag.) LED 2160p	6,349.29	7752	1,402.71	18.09%
827-55" Class (54.6" Diag.) LED Curved	3,808.20	4656	847.80	18.21%
454-65" Class (64.5" Diag.) LED 2160p	1,065.77	1307	241.23	18.46%
5-60" Class (60" Diag.) LED 2160p	6,710.74	8232	1,521.26	18.48%
28-65" Class (64.5" Diag.) 2160p Smart	3,142.04	3856	713.96	18.52%
214-88" Class (88" Diag.) LED Curved	11,752.84	14432	2,679.16	18.56%
810-65" Class (64.5" Diag.) LED Curved	17,720.30	21762	4,041.70	18.57%
457-50" Class (49.5" Diag.) LED 2160p	8,259.52	10148	1,888.48	18.61%
39-48" Class (47.6" Diag.) LED 2160p	2,183.31	2684	500.69	18.65%
208-65" Class (64.5" Diag.) LED Curved 2160p	14,786.55	18197	3,410.45	18.74%
226-48" Class (47.6" Diag.) LED 2160p	15,723.42	19375	3,651.58	18.85%
462-65" Class (64.5" Diag.) LED Curved	1,603.37	1976	372.63	18.86%
219-55" Class (54 5/8" Diag.) LED	1,848.47	2280	431.53	18.93%
211-78" Class (78" Diag.) – LED Curved 2160p	3,210.06	3960	749.94	18.94%
461-28" Class (27 1/2" Diag.) LED	16,095.83	19872	3,776.17	19.00%
818-55" Class (54.6" Diag.) LED 1080p	5,699.68	7040	1,340.32	19.04%
218-65" Class (64 1/2" Diag.) LED	2,944.27	3640	695.73	19.11%
204-55" Class (54.6" Diag.) LED Curved	12,216.58	15104	2,887.42	19.12%
488-55" Class (54.6" Diag.) LED 2160p	3,204.34	3963	758.66	19.14%
206-55" Class (54.6" Diag.) LED Curved	4,825.76	5970	1,144.24	19.17%

Year	Quarter	Month	Day	Total Sales	YTD	QTD	MTD
2019	Qtr 1	February	3				
2019	Qtr 1	February	4				
2019	Qtr 1	February	5	339	0.000339M	0.000339M	0.000339M
2019	Qtr 1	February	6	510	0.000849M	0.000849M	0.000849M
2019	Qtr 1	February	7	115	0.000964M	0.000964M	0.000964M
2019	Qtr 1	February	8	2103	0.003067M	0.003067M	0.003067M
2019	Qtr 1	February	9	124	0.003191M	0.003191M	0.003191M
2019	Qtr 1	February	10	2425	0.005616M	0.005616M	0.005616M
2019	Qtr 1	February	11		0.005616M	0.005616M	0.005616M
2019	Qtr 1	February	12	2178	0.007794M	0.007794M	0.007794M
2019	Qtr 1	February	13	654	0.008448M	0.008448M	0.008448M
2019	Qtr 1	February	14	2014	0.010462M	0.010462M	0.010462M
2019	Qtr 1	February	15	600	0.011062M	0.011062M	0.011062M
2019	Qtr 1	February	16	657	0.011719M	0.011719M	0.011719M
2019	Qtr 1	February	17	2118	0.013837M	0.013837M	0.013837M
2019	Qtr 1	February	18	146	0.013983M	0.013983M	0.013983M
2019	Qtr 1	February	19	2632	0.016615M	0.016615M	0.016615M
2019	Qtr 1	February	20	1896	0.018511M	0.018511M	0.018511M
2019	Qtr 1	February	21	1933	0.020444M	0.020444M	0.020444M
2019	Qtr 1	February	22	578	0.021022M	0.021022M	0.021022M
2019	Qtr 1	February	23	3600	0.024622M	0.024622M	0.024622M
2019	Qtr 1	February	24	2300	0.026922M	0.026922M	0.026922M
2019	Qtr 1	February	25	422	0.027344M	0.027344M	0.027344M
2019	Qtr 1	February	26	4746	0.03209M	0.03209M	0.03209M

Purpose Of this Project

This project aimed to revolutionize inventory management by transforming raw data into strategic decision-making gold.

Key Features & Technique used

ETL Process: Employing robust ETL (Extract, Transform, Load) processes, I transformed complex raw inventory data into a coherent, structured dataset, laying the foundation for powerful analyses.

DAX-EX: With the help of DAX (Data Analysis Expressions), I engineered intricate calculations, metrics, and KPIs, uncovering deep-seated trends and patterns within the inventory data.

Drill-Through Magic: Leveraging the drill-through function, I enabled stakeholders to dive into the nitty-gritty details of inventory items, fostering a profound understanding of their behavior and performance.

Sales Forecasting : Through cutting-edge forecasting techniques, I predicted future demand with remarkable accuracy, paving the way for proactive inventory replenishment strategies.

Predictive Analytics : By integrating predictive models, I empowered the organization to predict potential out-of-stock and under-stock scenarios, mitigating costly disruptions.

Inventory Insights: Crafting dynamic dashboards, I visualized stock status, calculated expected prices for re-stocking, and tracked inventory turnover, ensuring a comprehensive grasp of inventory health.

Data Modeling: With meticulous data modeling and relationship building, I created a robust data foundation that allowed for seamless navigation and a 360-degree view of inventory dynamics.

Topic Covered

- Year Wise Inventory
- Target Vs Present Inventory
- Inventory value by store
- Daily inventory trend and monthly turnover
- KPI (Total Unit, Present inventory, Inventory value, Under stock, out of stock over stock, Expected re-stocking cost, Total Sales, Total Profit, Profit Margin %, YOY Growth, YTD, Total Orders, Unique orders By region)
- Daily inventory Vs Daily Orders
- Sales and Profit by Brand
- Year Wise sales profit and profit margin
- Monthly sales trends with 6 month forecast
- Product wise sales details report
- Year wise sales details report