



Final Report: SQL Inventory Analysis Project – Sample Superstore.


Executive Summary

This report showcases how SQL was used to extract meaningful, actionable insights from the **Sample Superstore dataset** (Kaggle). By analyzing data from 2014–2017, we uncovered hidden trends and business-critical issues in sales, profit, customer behavior, and shipping performance. These insights are designed to support **inventory planning, pricing optimization, and strategic marketing** for better decision-making.

Key Business Insights

Top Revenue-Generating Products

-  Canon imageCLASS 2200 Advanced Copier generated the highest revenue: ₹61,599.83.
-  Most top-selling items are office machines and binding systems, showing dominance of office equipment in large transactions.

 *Recommendation:* Focus marketing and inventory stocking efforts on high-demand office technology products.

Regional Profitability Analysis

- **West Region** leads with a total profit of ₹97,994.30
- Close second: **East Region** – ₹94,402.26
- **South Region** lags far behind – only ₹30,079.36

 *Observation:* The South region is underperforming significantly.

📌 Monthly & Seasonal Sales Trends

- 📈 November 2017 saw peak sales: ₹117,903.43 — consistent spikes in November and December each year.
- 📉 Lowest sales occur in January and February, especially Feb 2014 with only ₹4,519.92.

✅ *Recommendation:* Increase stock and campaigns in Q4. Scale down in Q1, or use offers to maintain flow.

📌 Customer Segment Analysis

- **Consumer Segment** dominates with ₹11.6+ lakhs (~47.6% of total sales).
- **Corporate** follows (~28.9%), while **Home Office** is smallest (~17.6%).

📌 Unprofitable High-Sales Products

Product	Sales	Profit
Cubify cubeX 3D printer	\$11,099.96	\$8,879.97
Cisco TelePresence System	\$22,368.48	\$1,811.08

💡 These products sell well but lose money.

✅ *Actionable Insight:* Reassess supplier contracts, pricing models, and discount strategies for these items.

📌 Top Customers by Lifetime Value (LTV)

- 🏆 **Sean Miller:** ₹25,043.07
- Others: Tamara Chand, Raymond Buch, Tom Ashbrook, Adrian Barton


📌 Shipping Performance

- ⌚ Average shipping time: **3.96 days**

Category-Wise Sales

Category	Sales
Technology	\$835,305.84
Furniture	\$732,479.31
Office Supplies	\$702,867.25


 *Insight:* Office Supplies bring the least revenue.

 *Recommendation:* Revamp Office Supplies with bundled deals, more variety, or strategic discounts.

Conclusion

Using SQL, we uncovered deep insights that go beyond raw numbers. The project highlights the importance of:

- Analyzing not just what sells, but what sells profitably
- Monitoring regional & seasonal patterns
- Understanding customer value beyond transactions
- Using data to drive targeted actions across departments

 ***This project helped me understand how SQL can go beyond queries to uncover real-world business insights — bridging the gap between raw data and strategic action.***