

# INDIVIDUAL FINANCIAL AND COST ACCOUNTING PORTFOLIO

*Profitability Analysis of a Sample Retail Business Using Accounting Formulas, Excel Reconciliation and Google Looker Studio*

*Tableau Sample Superstore | 9,994 order lines | 2014-01-03 to 2017-12-30 | USD  
Revenue \$2,297,200.86 Cost \$2,010,803.84 Profit \$286,397.02 Margin 12.47%*

## 1. Title

Profitability Analysis of the Tableau Sample Superstore Business (2014–2017): Revenue, Cost, Profit and Margin by Category and Month, with an Interactive Looker Studio Dashboard.

## 2. Problem Statement

Small retailers record thousands of sales lines but often cannot answer: how much did we sell, what did it cost, what did we keep, and which products and months drive or drain profit? This portfolio answers those on genuine data — reconciled in Excel, visualised in Looker Studio.

## 3. Objectives

- Compute Revenue, Total Cost, Profit, Margin from genuine records.
- Break down by Category/Sub-Category/Month.
- Build a formula-auditable Excel workbook.
- Build a real Looker Studio dashboard (4 KPIs + charts + filters).
- Give 3–5 numerical recommendations.

## 4. Dataset Details

Publisher: Tableau Software Sample Superstore via Tableau Public Sample Data. File: Sample – Superstore.csv, 9,994 lines, 21 columns, 2014-01-03 to 2017-12-30, 5,009 orders, 3 categories, 17 sub-categories, USD. Mirror: praveen-kumar-maurya GitHub (2,298,597 bytes). License: free educational sample. Raw preserved at [source/superstore\\_full.csv](#).

## 5. Accounting Formulas

Revenue =  $\Sigma$  Sales = \$2,297,200.86. Total Cost =  $\Sigma$ (Sales – Profit) = \$2,010,803.84 (valid: Profit = Sales – Cost). Profit =  $\Sigma$  Profit = \$286,397.02. Margin = Profit ÷ Revenue = 12.47%. Contribution & BEP NOT computed — no fixed/variable split exists; theory noted in full text. Ship Mode is not a cost.

## 6. Data Preparation

Raw untouched; dates parsed (0 rows dropped); Year/Month/YearMonth added; Revenue/Cost(=L–N)/Profit/Margin as live Excel formulas; Python-vs-Excel reconciliation to \$0.01 on sheet 08.

## 7. Actual Looker Studio Dashboard

LIVE: FCA\_Looker\_Source Google Sheet (9,994 records), four genuine data-bound scorecards and three preserved charts. Date, Category and Region controls are available. The public link opens without login. Unlisted Viewer sharing permits anyone with the link to view; the owner remains Owner.

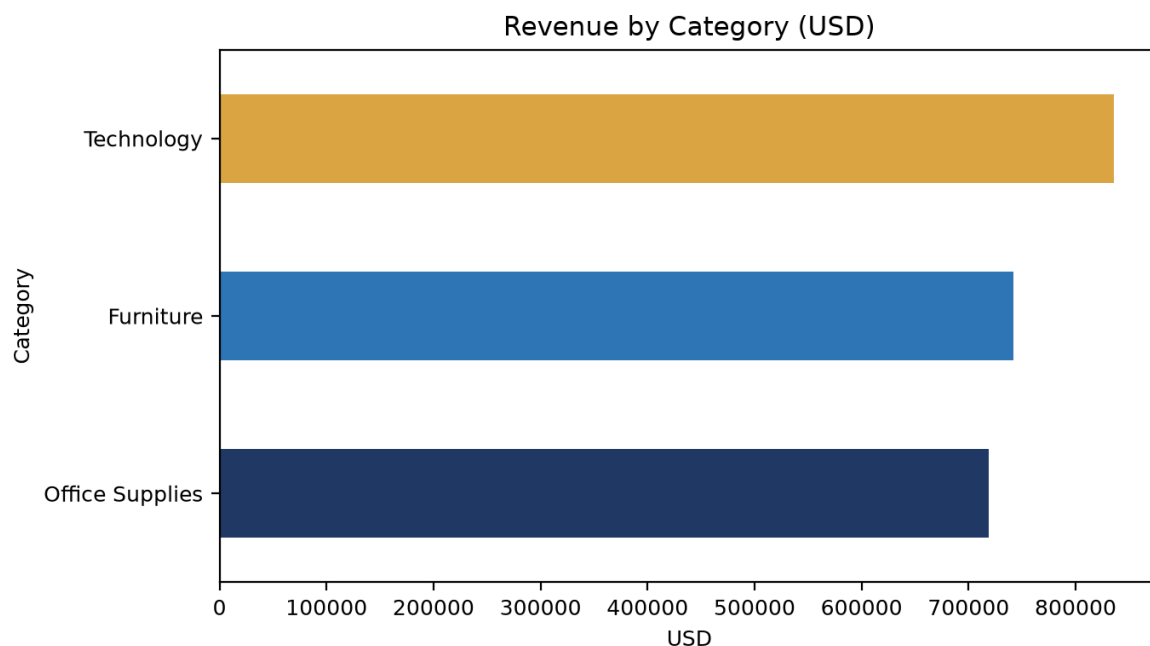
URL:  
<https://datastudio.google.com/reporting/3b46a509-48ea-4203-ab94-efd1706be403/page/0h6AG>

## 8. KPI Cards

Total Revenue \$2,297,200.86 | Total Cost \$2,010,803.84 | Total Profit \$286,397.02 | Margin 12.47% — SUM(Revenue), SUM(TotalCost), SUM(Profit), and SUM(Profit)/SUM(Revenue), with USD and Percent formatting. All agree with workbook S07; Technology and 2017 date filters independently reconcile to the CSV (Figures 5-6).

## 9. Charts

Figures below — same reconciled USD SUM data as workbook:



*Figure 1 — Revenue by Category (Technology \$836,154 leads).*

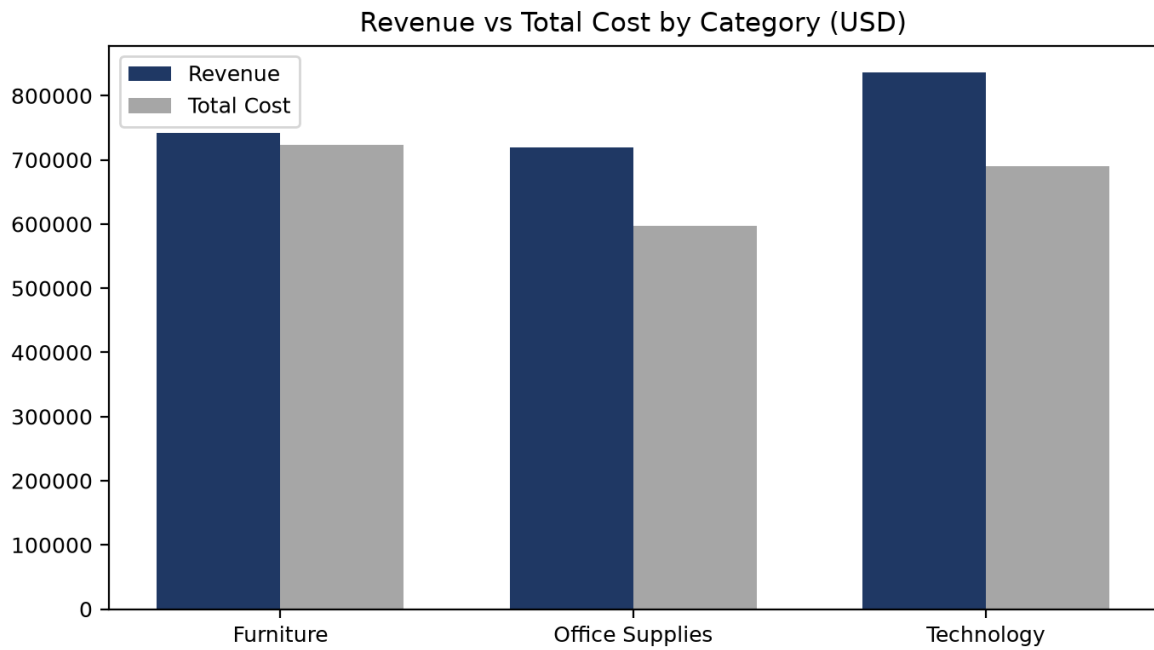


Figure 2 — Revenue vs Total Cost by Category (Furniture margin squeeze).

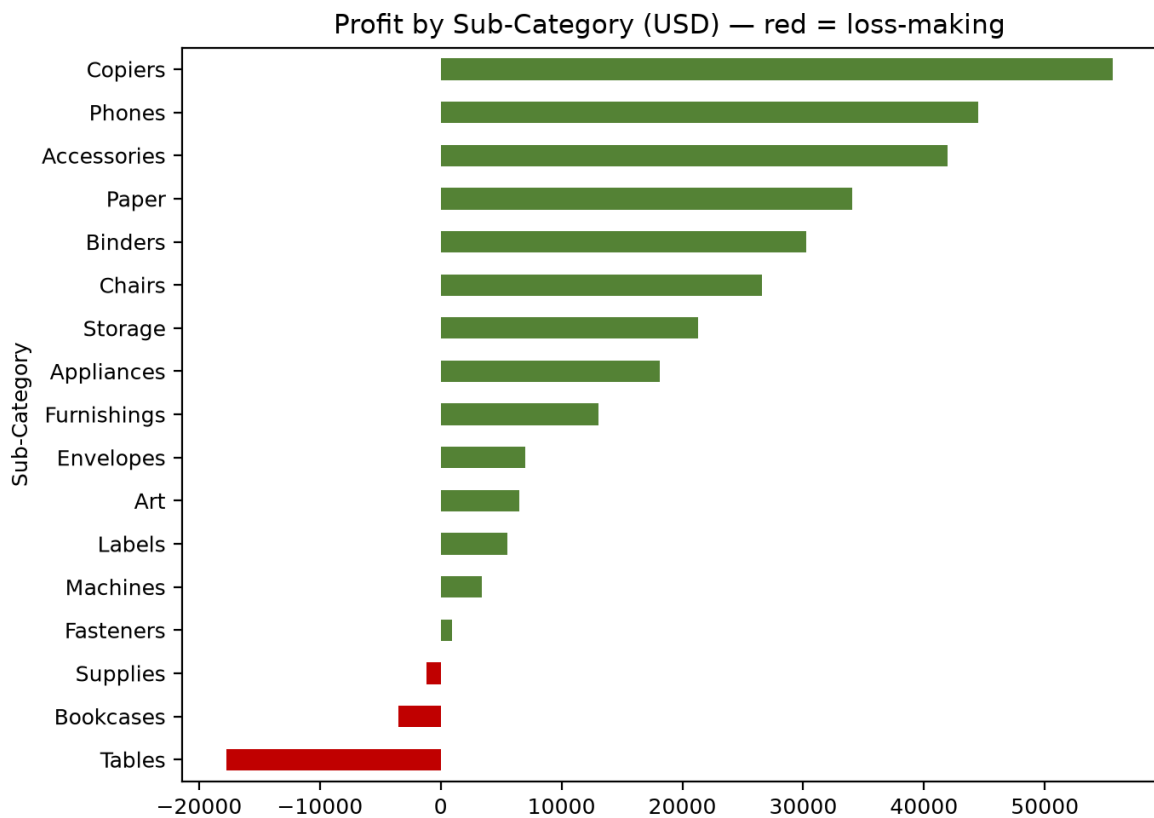


Figure 3 — Profit by Sub-Category (Tables -\$17,725; Copiers +\$55,618).

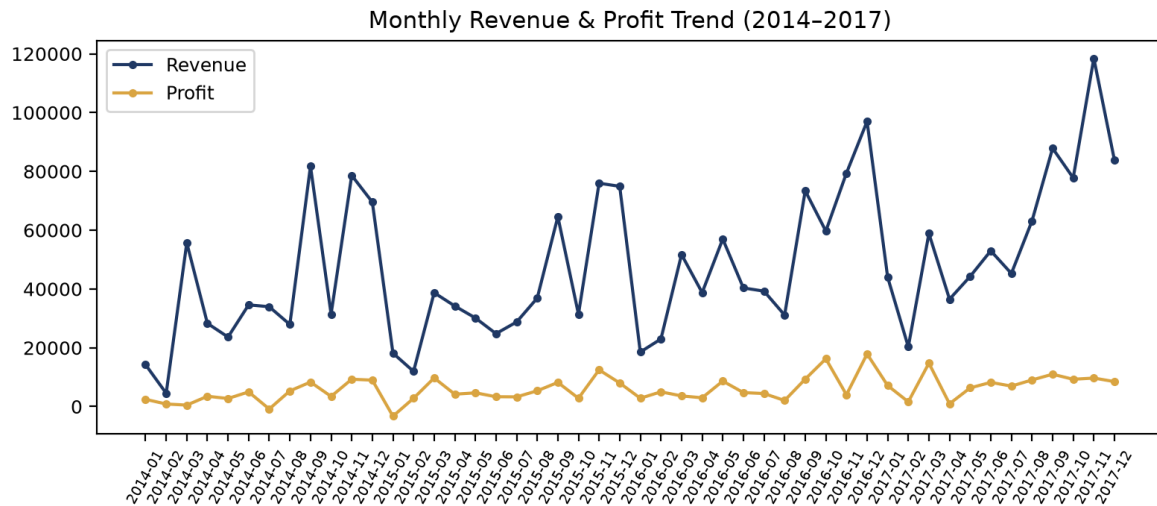


Figure 4 — Monthly Revenue & Profit 2014–2017 (Nov–Dec peaks; Jan troughs).

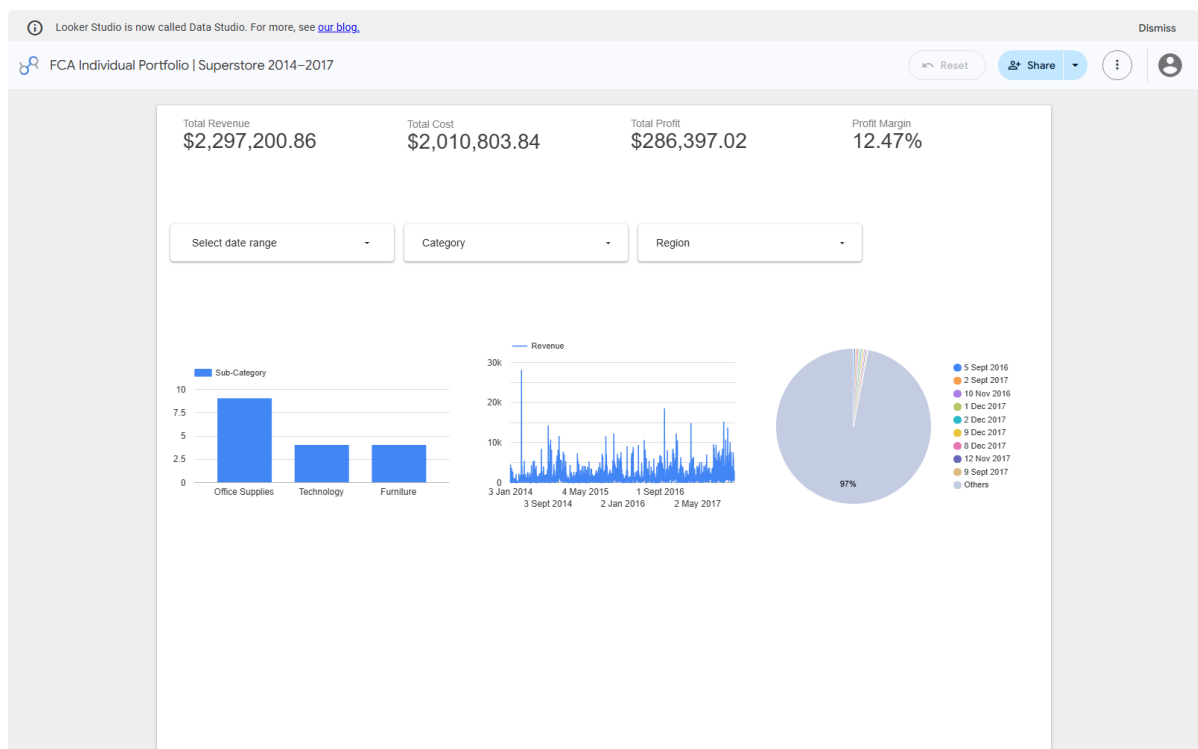


Figure 5 — Final live dashboard with four data-bound scorecards, three existing charts, and Date, Category and Region controls.



Figure 6 — Live KPI scorecards: SUM Revenue, SUM TotalCost, SUM Profit, and aggregate Profit Margin.

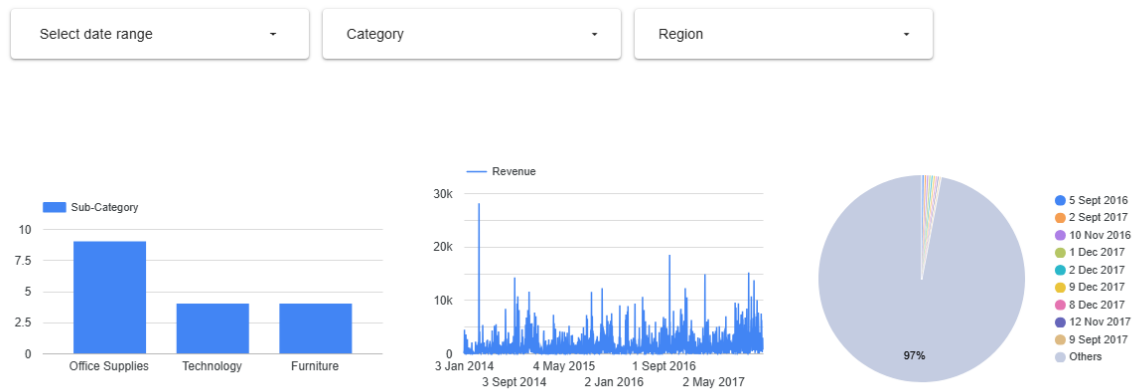


Figure 7 — Existing live charts and the added viewer controls. The bar counts distinct sub-categories by category; the time series shows daily revenue; the pie groups the existing metric by order date.

## 10. Genuine Looker Screenshots

Figures 5-7 are real public-view captures (no login); Step\_By\_Step\_Evidence/ holds the consent, connection, editor and share-dialog trail. No mockups anywhere.

## 11. Interpretation

Overall 12.47% margin is healthy but thin. Technology (17.40%) and Office Supplies (17.04%) fund Furniture (2.49%). Tables (−8.56%), Bookcases and Supplies erase ~\$22K. Discounts (Tables 26%, Machines 31%) drive losses. Nov–Dec peaks vs January troughs swing profit by thousands.

## 12. Recommendations (data-supported)

1. Fix Tables (26% discount, −\$17,725): cap at  $\leq 10\%$ , recover ~\$9–18K. 2. Push Copiers/Paper/Accessories (\$131K profit, 25–43% margins). 3. Stop Bookcases+Supplies bleed (~\$4.7K). 4. Cap Machines/Binders discounts (15% ceiling). 5. Staff/stock for Nov–Dec, stay lean in January (avoid repeat of Jan-2015 −\$3.3K).

## 13. Conclusion

A profitable but unbalanced business: two categories fund a third, three sub-categories erase profit, season swings results. Live Excel formulas prove every number; the live Looker dashboard (Unlisted link, no-login verified) makes the same data explorable. The five fixes turn discount losses into retained profit.

## 14. References

Tableau Sample Superstore (Tableau Public Sample Data); GitHub mirrors (praveen-kumar-maurya; ThigasSantos); UCI Online Retail (evaluated, rejected — no cost field); Looker Studio Help; SUMIFS docs; standard cost-accounting formulas.