| **Domain** | **KPI** | **Formula** | **SQL Query Summary** |
| --- | --- | --- | --- |
| **Retail** | Gross Margin % | (Revenue - COGS) / Revenue \* 100 | SELECT ROUND((SUM(revenue) - SUM(cogs)) / SUM(revenue) \* 100, 2) FROM sales; |
| **Retail** | Inventory Turnover | COGS / Average Inventory | SELECT SUM(cogs) / AVG(inventory\_value) FROM inventory; |
| **Retail** | Average Order Value (AOV) | Total Revenue / Total Orders | SELECT ROUND(SUM(total\_amount) / COUNT(DISTINCT order\_id), 2) FROM orders; |
| **Retail** | Customer Retention Rate | ((E - N) / S) \* 100 | CTE comparing monthly customers |
| **Retail** | Return Rate | Returned Items / Sold Items \* 100 | SELECT SUM(returned\_items) \* 100.0 / SUM(sold\_items) FROM sales\_returns; |
| **Retail** | Shrinkage Rate | (Recorded Inventory - Actual Inventory) / Recorded \* 100 | SELECT ((SUM(recorded\_inventory) - SUM(actual\_inventory)) \* 100.0 / SUM(recorded\_inventory)) FROM inventory\_audit; |
| **Retail** | Conversion Rate | Purchases / Visitors \* 100 | SELECT COUNT(DISTINCT purchase\_id) \* 100.0 / COUNT(DISTINCT visitor\_id) FROM web\_traffic; |
| **Retail** | YoY Revenue Growth | (This Year Revenue - Last Year Revenue) / Last Year \* 100 | Window function using LAG() over years |
| **Retail** | Cumulative Sales | Running total of sales over time | SUM(sales) OVER (ORDER BY order\_date) |
| **Finance** | Net Profit Margin | Net Profit / Revenue \* 100 | SELECT SUM(net\_profit) / SUM(revenue) \* 100 FROM financials; |
| **Finance** | Return on Assets (ROA) | Net Income / Total Assets | SELECT ROUND(SUM(net\_income) / AVG(total\_assets) \* 100, 2) FROM financials; |
| **Finance** | Working Capital | Current Assets - Current Liabilities | SELECT SUM(current\_assets) - SUM(current\_liabilities) FROM balance\_sheet; |
| **Finance** | EBITDA | Earnings + Interest + Taxes + Depreciation + Amortization | SELECT SUM(earnings + interest + taxes + depreciation + amortization) FROM income\_statement; |
| **Finance** | Operating Expense Ratio | Operating Expenses / Revenue \* 100 | SELECT SUM(operating\_expense) \* 100.0 / SUM(revenue) FROM financials; |
| **Finance** | Quick Ratio | (Current Assets - Inventory) / Current Liabilities | SELECT (SUM(current\_assets) - SUM(inventory)) / SUM(current\_liabilities) FROM balance\_sheet; |
| **Finance** | YoY Profit Growth | (This Year Profit - Last Year Profit) / Last Year \* 100 | LAG() on net\_profit by fiscal\_year |
| **Finance** | Cumulative Revenue | Running total of revenue over time | SUM(revenue) OVER (ORDER BY fiscal\_year) |
| **Banking** | Loan-to-Deposit Ratio | Total Loans / Total Deposits | SELECT SUM(loan\_amount) / SUM(deposit\_amount) FROM bank\_balances; |
| **Banking** | Non-Performing Loan (NPL) Ratio | Non-Performing Loans / Total Loans | COUNT(CASE WHEN loan\_status = 'default' THEN 1 END) / COUNT(\*) FROM loans; |
| **Banking** | Net Interest Margin (NIM) | (Interest Income - Interest Expense) / Avg Earning Assets | SELECT (SUM(interest\_income) - SUM(interest\_expense)) / AVG(earning\_assets) FROM income\_statement; |
| **Banking** | Capital Adequacy Ratio (CAR) | (Tier 1 + Tier 2 Capital) / Risk Weighted Assets | SELECT (SUM(tier1\_capital) + SUM(tier2\_capital)) / SUM(risk\_weighted\_assets) FROM bank\_capital; |
| **Banking** | Cost-to-Income Ratio | Operating Costs / Operating Income \* 100 | SELECT SUM(operating\_costs) \* 100.0 / SUM(operating\_income) FROM bank\_financials; |
| **Banking** | Return on Risk-Weighted Assets | Net Income / Risk-Weighted Assets | SELECT SUM(net\_income) / SUM(risk\_weighted\_assets) FROM bank\_performance; |
| **Banking** | YoY Loan Growth | (Current Year Loans - Last Year Loans) / Last Year \* 100 | LAG() on loan\_amount by year |
| **Banking** | Cumulative Deposits | Running total of deposits over time | SUM(deposit\_amount) OVER (ORDER BY report\_date) |
| **Healthcare** | Readmission Rate | Readmitted Patients / Total Discharged \* 100 | CTE on readmissions within 30 days |
| **Healthcare** | Bed Occupancy Rate | Occupied Beds / Total Beds \* 100 | SUM(occupied\_beds) / SUM(total\_beds) \* 100 FROM hospital\_daily\_status; |
| **Healthcare** | Average Length of Stay (ALOS) | Total Inpatient Days / Total Discharges | AVG(discharge\_date - admission\_date) FROM admissions; |
| **Healthcare** | Claim Rejection Rate | Rejected Claims / Total Claims \* 100 | SUM(claims\_rejected) \* 100.0 / SUM(claims\_submitted) FROM insurance\_claims; |
| **Healthcare** | Patient Satisfaction Score | Average of Survey Scores | AVG(satisfaction\_score) FROM patient\_feedback; |
| **Healthcare** | Appointment No-Show Rate | Missed Appointments / Total Appointments \* 100 | SUM(missed\_appointments) \* 100.0 / COUNT(\*) FROM appointments; |
| **Healthcare** | YoY Admissions Growth | (This Year Admissions - Last Year Admissions) / Last Year \* 100 | LAG() on admissions count by year |
| **Healthcare** | Cumulative Patient Count | Running total of patients over time | COUNT(patient\_id) OVER (ORDER BY visit\_date) |