■ Automated Sales Reporting with SQL Server & Power BI

One-Line Takeaway

Automated SQL + Power BI solution that cut sales reporting time by **70%**, delivering real-time insights across product, store, and region performance.

Business Problem

The organization relied on **manual sales reporting**, which caused delays in decision-making and inconsistent insights. Sales managers, executives, and regional teams lacked timely visibility into sales trends across products and regions.

Project Inspiration

I noticed that reporting teams spent hours each week preparing the same daily, weekly, and monthly reports in Excel. This inspired me to automate reporting with **SQL Server** and connect it to **Power BI** for self-serve insights.

Project Context

The project uses a **Retail Superstore dataset** containing:
- Sales transactions
- Product details
- Store information

SQL Server stored procedures were created to automate reporting, and the results were integrated with **Power BI dashboards** for easy access.

Project Goal

- ■■ Save Time – Reduce reporting turnaround from hours to seconds
- ■■ Be Flexible – On-demand Daily / Weekly / Monthly summaries
- ■ Deliver Insights – Track top products, regions, and store performance

Quantified Results

- ■ 60–70% reduction in manual reporting effort
- ■ Consistent & accurate outputs across departments
- ■ Real-time insights available via Power BI dashboards

Business Impact

Before:
- 6–8 hours weekly spent on manual reporting
- Risk of errors and inconsistent Excel outputs

After:
- Automated SQL + Power BI → instant insights
- Consistent reporting across Sales, Finance, and Operations
- Leaders access live dashboards anytime

How It Helps Stakeholders

- Sales Managers → Monitor daily and weekly momentum by product and store
- Regional Managers → Compare store performance across locations
- Executives → Access quick monthly revenue snapshots
- Finance & Operations → Use reliable data for planning and budgeting

Power BI Dashboard & Insights

The automated SQL outputs power an **interactive Power BI dashboard**, enabling drill-down by date, store, product, and region.

Key Insights:
- Weekly Trend: Stable sales with spikes during promotions
- Monthly Trend: Strong January (~9.9%), steady 8–9% thereafter
- Top Products: Coffee (~39%) and Tea (~28%) dominate sales
- Daily Pattern: Mon–Tue peak (>16%), Sunday rebound (~14%)
- Regional View: London, Nigeria, and Paris are leading contributors

Key Skills Demonstrated

- SQL Server: Stored procedures, aggregations, automated reporting
- Power BI: Data modeling, visualization, dashboard design
- Business Analysis: Translating stakeholder needs into analytics solutions
- Data Storytelling: Presenting insights for decision-making

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Focus: Automating reporting and delivering decision-ready analytics

Power BI Dashboard Preview