

End-to-End E-Commerce Sales & Operations Analytics

Project Pitch Card

Project Type	Industry-Level Data Analytics Project
Domain	E-Commerce Retail Operations Analytics
Tech Stack	Python, SQL, Power BI
Dataset Size	129K+ Transaction Records
Objective	Convert raw ecommerce data into actionable business insights

Problem Statement

E-commerce businesses struggle with understanding sales trends, order failures, logistics inefficiencies, and regional performance. This project addresses these challenges by analyzing historical order-level data to support data-driven decisions.

What I Did (End-to-End)

- Cleaned and preprocessed raw transactional data using Python
- Performed Exploratory Data Analysis to identify trends and anomalies
- Engineered business-ready features for analysis
- Answered real business questions using SQL
- Built interactive Power BI dashboards for stakeholders

Key Insights Delivered

- Identified high-revenue product categories and size groups
- Discovered regional zones with high order failure rates
- Analyzed pricing segments impacting order success
- Highlighted seasonality and monthly sales trends

Business Impact

- Supports inventory and pricing optimization
- Helps reduce failed deliveries
- Improves revenue forecasting and operational planning

Why This Project Matters

This project mirrors real-world Data Analyst responsibilities by combining technical skills with business thinking, making it directly relevant for industry roles.

Skills Demonstrated

Python(EDA,FeatureEngineering), SQL (Business Queries), Power BI (Dashboards, KPIs), Analytical Thinking, Business Communication