Operational Risk & Returns Analysis

Project objective

To analyze return behavior, refund losses, and delivery delays across product categories and regions in a simulated e-commerce dataset, using Python and

Tools Used

- Python (Pandas, Matplotlib – via Google Colab)
- Excel (Pivot Tables, Charts)
- GitHub for documentation

KPIs Calculated:

- Total Delay = Delivery – Dispatch
- Return % per Category
- Refund % of Product Price
- High-Risk Zones (Delay Risk > 70%)

Key Insights:

- Highest Return in Home and kitchen
- North region incurred maximum refund amounts
- Most returns due to Cancellation by buyer.
- South & North regions had highest avg delivery time

Outcome:

Built a complete Python + Excel hybrid dashboard to showcase business problem-solving, data storytelling, and analytical thinking. All files documented on GitHub.