Internship Work Progress Report

Project Title: Financial KPI Analysis for a Startup

Intern Name: Rehan Paila

Tools Used: Python (Pandas), Microsoft Excel

Duration: 7 Days

Day 1: Project Setup & Understanding Metrics

- - Understood startup financial KPIs: Revenue, Expenses, CAC, LTV, Burn Rate.
  - Collected sample monthly data for a 6-month period.
  - Installed and prepared the Python environment for data processing.

Day 2: Python Script for Cleaning & KPI Calculation

- - Wrote Python script using Pandas to process the raw startup financial data.
  - Calculated:
    - Burn Rate = Expenses - Revenue
    - CAC = Marketing Spend / Customers
    - LTV = Revenue per Customer × 12
    - LTV:CAC Ratio
  - Exported the cleaned data into CSV format for Excel dashboarding.

Day 3: Import Cleaned Data into Excel

- - Imported the cleaned CSV file generated by Python.
  - Verified and formatted the data in Excel.
  - Organized columns and ensured clean structure for analysis.

Day 4: KPI Calculations & Dashboard Design in Excel

- - Used Excel formulas to reconfirm key metrics (LTV, CAC, Burn Rate).
  - Designed 4 KPI Cards using shapes: Total Revenue, Avg Burn Rate, LTV:CAC Ratio, Runway.
  - Applied conditional formatting (green/red) to indicate performance.

Day 5: Data Visualizations in Excel

- - Created charts:
    - Line chart for Revenue vs Expenses
    - Bar chart for Burn Rate
    - Column chart for LTV vs CAC
  - Added slicers/filters for month-wise interaction.

Day 6: Cohort Analysis Using Pivot Table

- - Grouped customers into cohorts by joining month.
  - Used Excel Pivot Table to show LTV, CAC by cohort group.
  - Analyzed which month acquired the most valuable customers.

Day 7: Report Writing & Final Review

- - Wrote professional summary explaining insights.
  - Included screenshots from the Excel dashboard.
  - Finalized folder with:
    - Excel workbook
    - Cleaned CSV
    - Python script
    - PDF Report
  - Project successfully simulates a real-world startup KPI analysis workflow.