TechHorizon internship

Task 1 Report – Sales Analytics Dashboard

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Introduction

This Sales Analytic Dashboard was created as part of the 2025 TechHorizon Internship. The objective was to design an interactive data analytic tool that businesses can use easily, that would let them analyze their sales performance more effectively.

Traditionally, sales reports are handled in spreadsheets, which can be time-consuming and error-prone when calculating metrics or providing insights. This dashboard which can be time-consuming and error-prone when calculating metrics or generating insights. This dashboard automates the process by allowing managers to view KPIs, study data interactively and export results for reporting.

The aim was to make the tool accessible for business decision-making with barely any technical understanding required.

For this project, I used a csv file that you can find on my GitHub.

Libraries and Tools

The following libraries were used:

- Pandas: essential tool for data cleaning, manipulating and calculations.
- Streamlit: Creating an interactive user-friendly dashboard interface.
- Plotly: Creating dynamic, visually appealing graphs.
- Python: the programming language that integrates all the components.

Methodology

The dashboard was created using streamlit and follows this workflow:

1. **Data Upload:** The user uploads a CSV or Excel file containing sales data.
2. **Data Cleaning:** Column names are standardized (removed spaces, consistent capitalization)
3. **Preview:** The dashboard provides a preview of the uploaded dataset (the first and last 5 rows)
4. **Validation:** The app checks for required columns like Revenue and Product.
5. **KPI Calculations –**

- Total Revenue
- Top Product by revenue

6. **Visualization:** Interactive charts are displayed using Plotly:

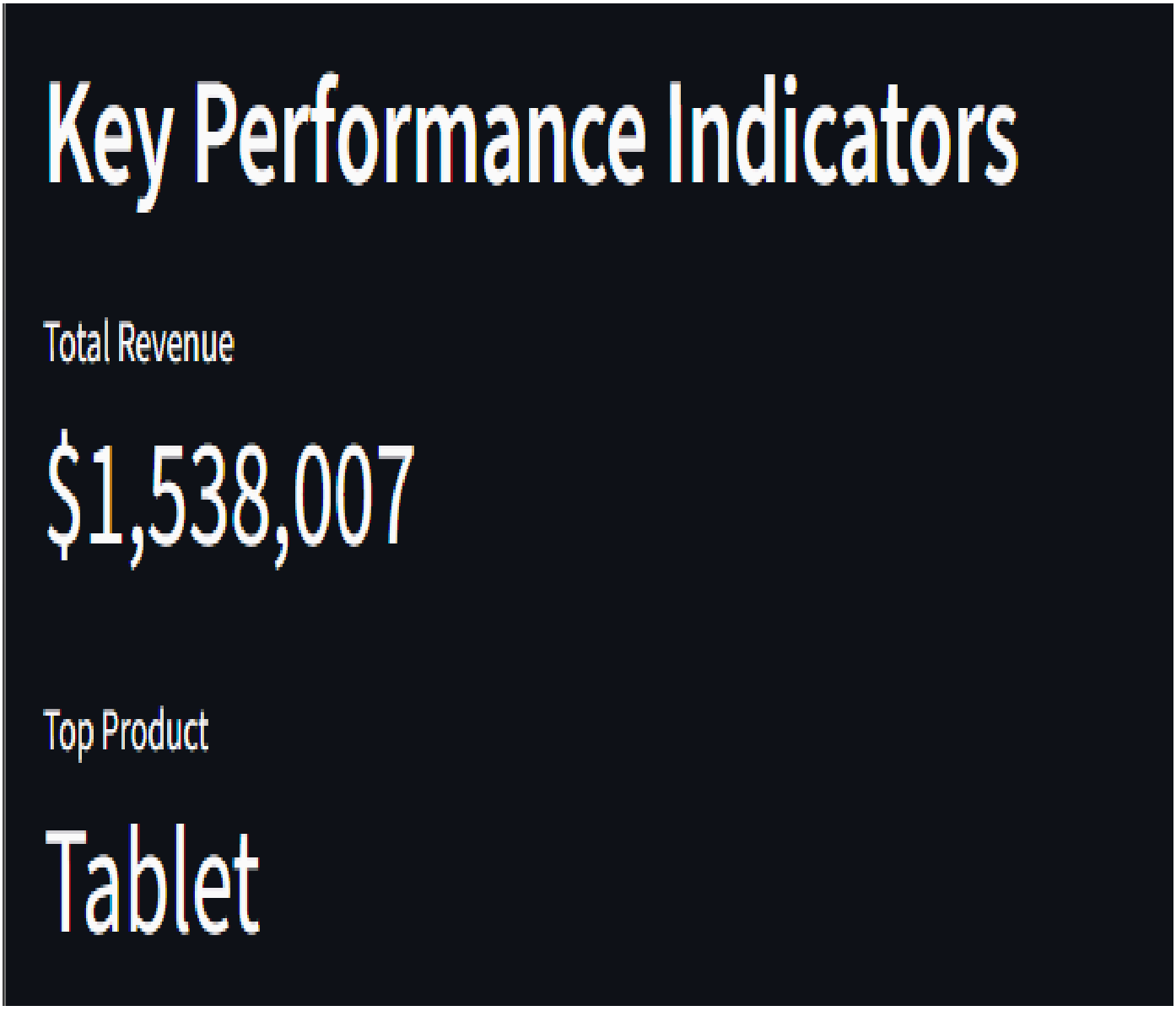
- Bar chart of Revenue by Product.
- Line chart of Revenue over Time.
- Pie chart of Revenue shared by Product.

7. **Report Export:** Users can download the cleaned dataset as a CSV for further use.

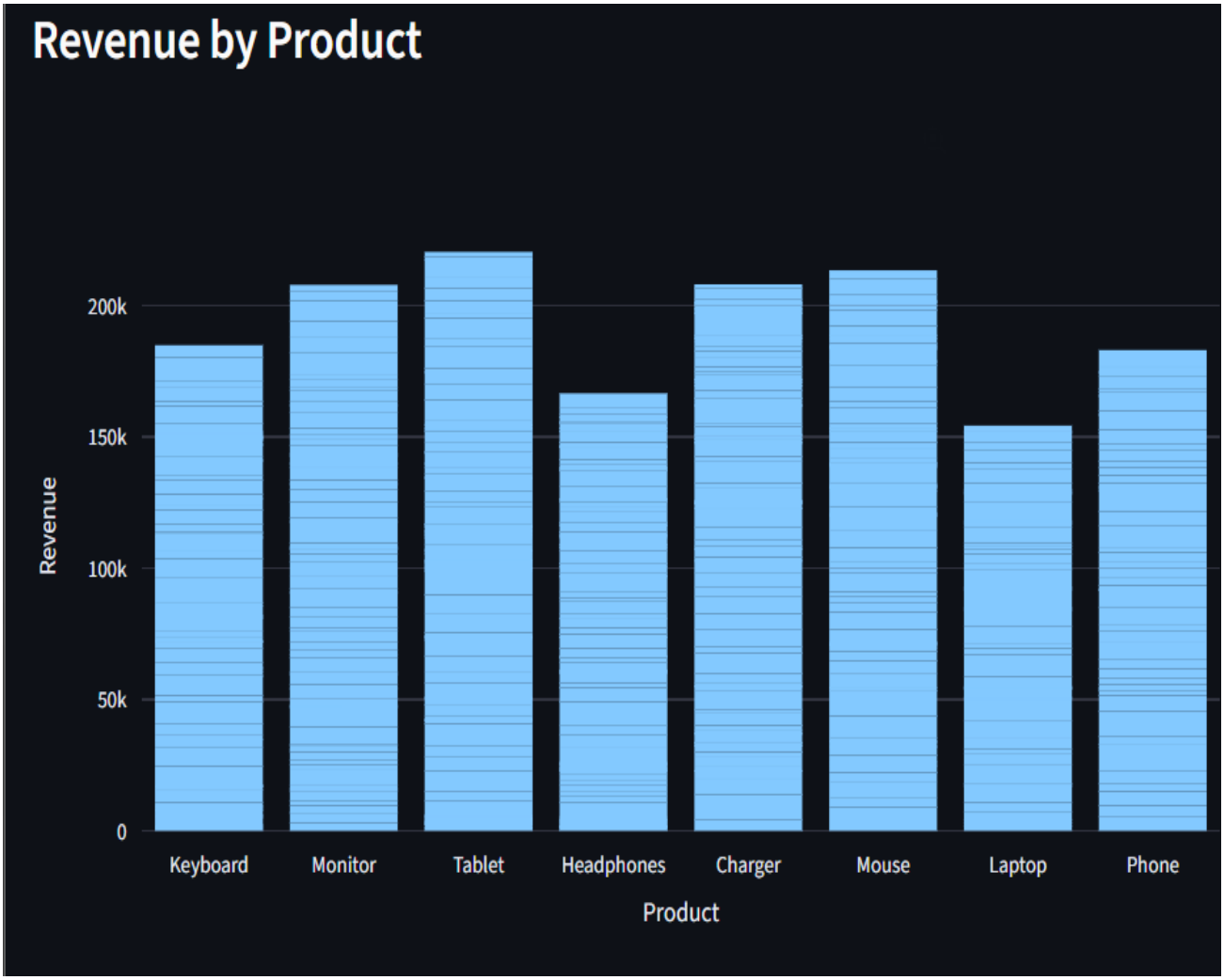
Results

The Sales data was successfully processed by the dashboard, which also produced visual summaries and numerical KPIs.

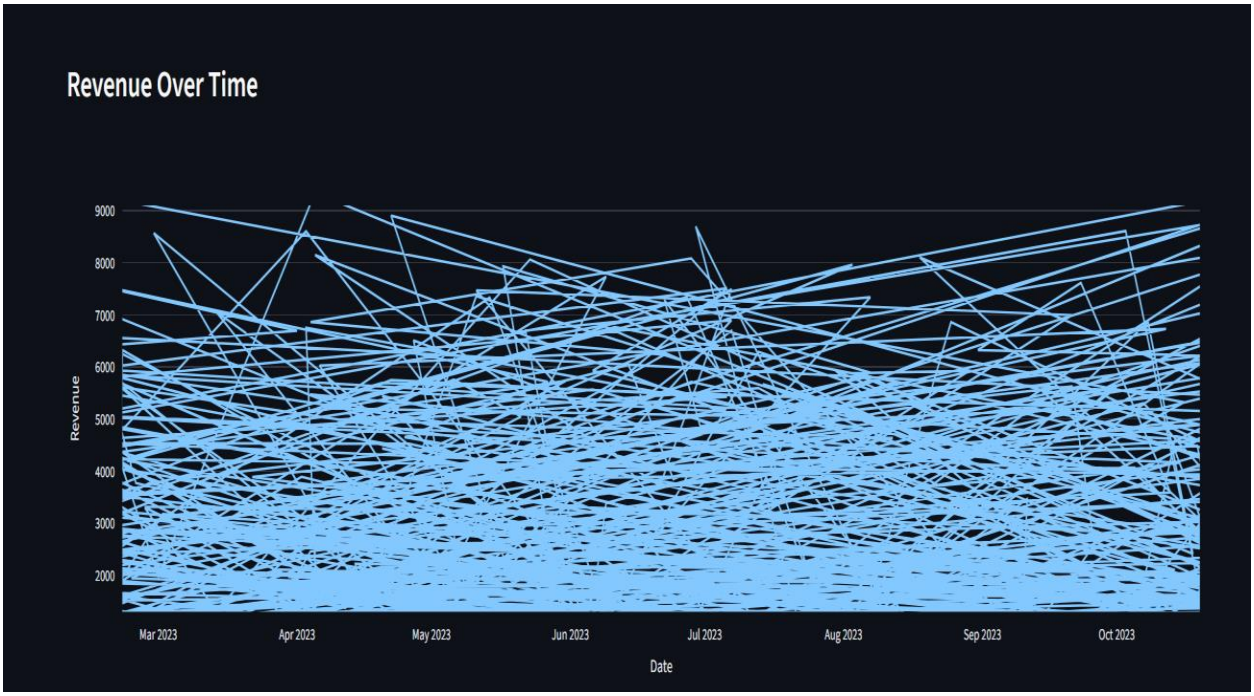
The KPI Section clearly displays the top product and total total revenue:



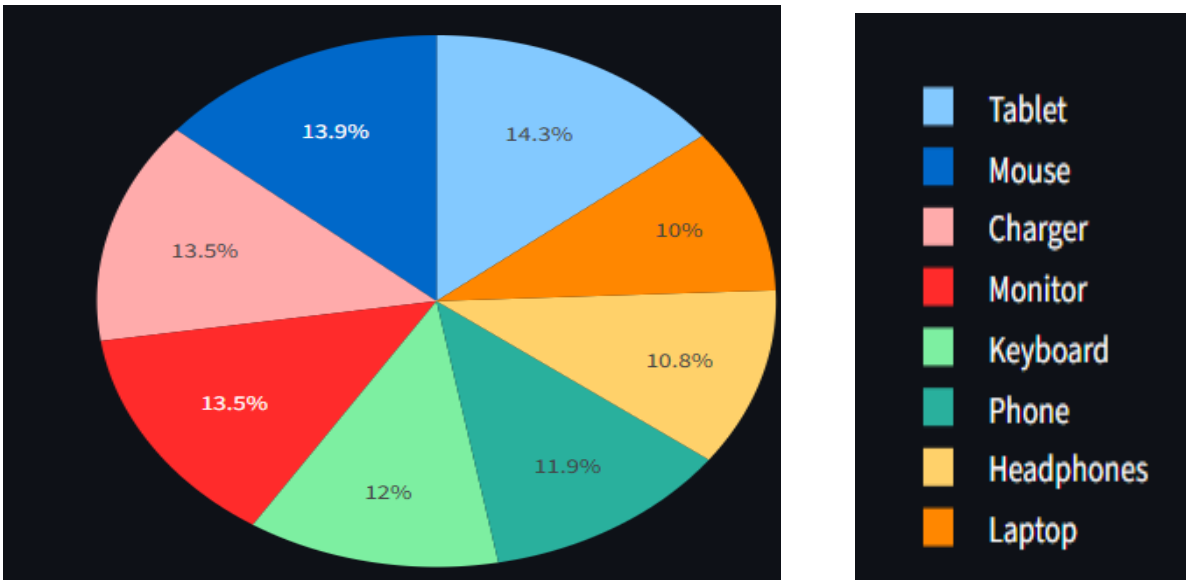
Bar chart shows revenue by product which makes it easier to see which product brings in the most money.



Revenue over time, line chart highlights various seasonal trends and growth.



The Revenue share pie chart shows the percentage of product performance.



Business Insights

The Sales Analytics Dashboard offers useful information like:

- Identifying which product generates the most revenue, which is helpful for marketing and inventory management.
- Knowing how revenue changes over time enables businesses to plan for periods of high or low demand.
- Delivering quick, exportable reports that can be used in management meetings.
- Minimizing manual work in excel and saving time of data analysts.

This is in line with TechHorizon’s mission to develop solutions that enable companies to make data-driven decisions.

Conclusion

Task 1 has fulfilled every requirement:

- Support for uploading files (CSV/Excel)
- Automatic KPI calculations
- Interactive visuals.
- Report that can be exported

The dashboard illustrates the usefulness of data analytics in business contexts by converting raw sales data into insightful knowledge.

This project showcases technical skills (Python, Pandas, Plotly, Streamlit) and highlights how crucial it is to provide solutions that connect technical analysis and practical business decision making.