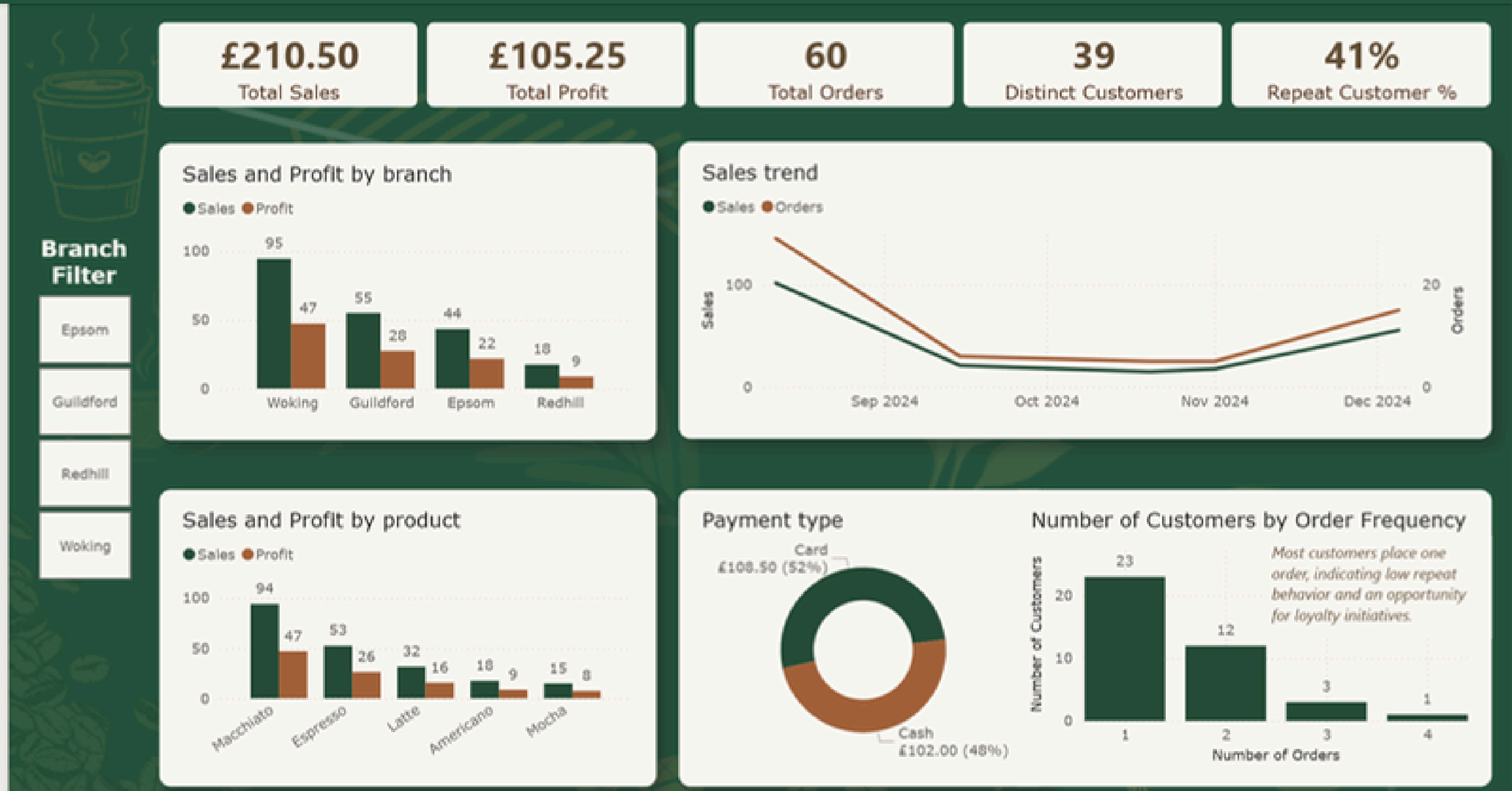
How - Tools & Architecture

Text File → Python ETL → Clean CSV → Power BI Dashboard

- Raw café sales data provided as a text file
- **Python** ETL prepares the data:
  - Cleans and standardises records
  - Removes sensitive information
  - Anonymises customer data
  - Calculates extra business logic (profit)
- Clean and prepared data saved as CSV file
- **Power BI** used to build interactive dashboard

What - Interactive Dashboard



- **KPI Cards -** *Provide an instant performance snapshot*
- **Bar Charts (Branch & Product Performance) -** *Make it easy to compare sales and profit across branches and products*
- **Line Chart (Sales Trend) -** *Shows trends in sales over time*
- **Pie Chart** - Displays customer payment preferences (cash vs card)
- **Bar Chart (Customer order-frequency)** *to distinguish between one-time and repeat customers.*
- **Slicer -** *Allows users to focus on performance for individual branches*

WHY - Tools Choices

Python

- Enables early data anonymisation
- Automates data cleaning and business logic
- Easily scalable beyond the pilot phase

Power BI

- Business-friendly and interactive
- Allows fast insight for non-technical users
- Suitable for local pilots and future expansion

Result:

clear insights, minimal effort, and a scalable foundation