

FINANCIAL KPI ANALYSIS FOR A STARTUP

INTRODUCTION

This project focuses on analysing key financial metrics for early-stage startups using a simulated dataset.

The goal is to derive insights from metrics such as revenue, profit, customer acquisition cost (CAC), lifetime value (LTV), and LTV:CAC ratio. The analysis was visualized through an interactive Power BI dashboard.

ABSTRACT

The dashboard titled 'Financial KPI Analysis for a Startup' offers a comprehensive overview of a startup's financial health. It highlights the Total Revenue, Total Profit, Average LTV:CAC Ratio, and Total Customers.

Multiple interactive visuals were used to identify trends, compare locations, and analyse cost contributions.

TOOLS USED

- Microsoft Excel: Data preparation and calculation of KPIs.
- Power BI: Dashboard creation and data visualization.
- DAX: For calculating dynamic measures in Power BI.

STEPS INVOLVED IN BUILDING THE PROJECT

1. Data Cleaning and Preparation:
 - Verified and cleaned data columns including revenue-related and customer metrics.
 - Calculated Total Revenue (Net Profit + Total Expenses).
 - Ensured data types were appropriate for analysis in Power BI.
2. Power BI Data Import and Measure Creation:
 - Imported the dataset into Power BI.
 - Created DAX measures for Total Revenue, Total Profit, Average LTV:CAC Ratio, and Total Customers.
3. Designed a Power BI dashboard with visuals:
 - Cards for Total Revenue, Profit, LTV:CAC, and Customer Count.

- Line and bar charts for comparing Customer Acquisition, CAC, and LTV across locations.
- Pie charts for Admin Cost Contribution and Customer Distribution.
- Slicers for Location and Burn Rate.

4. Enhanced interactivity using filters and slicers.

5. Validated insights to ensure correct financial interpretations.

FORMULAS USED

- $\text{Total Expenses} = \text{Product Development Cost} + \text{Admin Expenses} + \text{Marketing Expenses}$
- $\text{Burn Rate} = \text{Total Expenses}$
- $\text{Customer Count} = \text{ROUND}(\text{Marketing Expenses}/2000,0)$
- $\text{CAC} = \text{IFERROR}(\text{Marketing Expenses}/\text{Customer Count},0)$
- $\text{LTV} = \text{IFERROR}((\text{Net Profit}/\text{Customer Count}) * 12,0)$
- $\text{CAC:LTV Ratio} = \text{IFERROR}(\text{LTV}/\text{CAC},0)$

CONCLUSION

This project demonstrated the value of data visualization in financial decision-making for startups. The dashboard provided clear insights into where startups are allocating their budgets, how efficiently they're acquiring customers, and which regions are performing better. The interactive filters allowed for deeper exploration, making this a useful tool for stakeholders, investors, and financial analysts. Overall, the Power BI dashboard helped to convert raw startup data into meaningful KPIs for strategic analysis.