

Financial KPI Analysis Project Report

Introduction

This project delivers a concise financial metrics framework for an early stage startup, enabling stakeholders to track Monthly Recurring Revenue (MRR), Burn Rate, Cash Runway, Customer AcquisiCost (CAC) and Lifetime Value (LTV). The output includes a Power BI dashboard and supporting Excel model.

Abstract

Using publicly sourced sample data, we constructed a clean data pipeline in Excel and Python, then visualised trends and unit economics in Power BI. Key deliverables: an automated KPI table, cohort retention matrix, dual axis MRR Burn chart, and LTV:CAC performance indicator all refresh a with new monthly data.

Tools Used

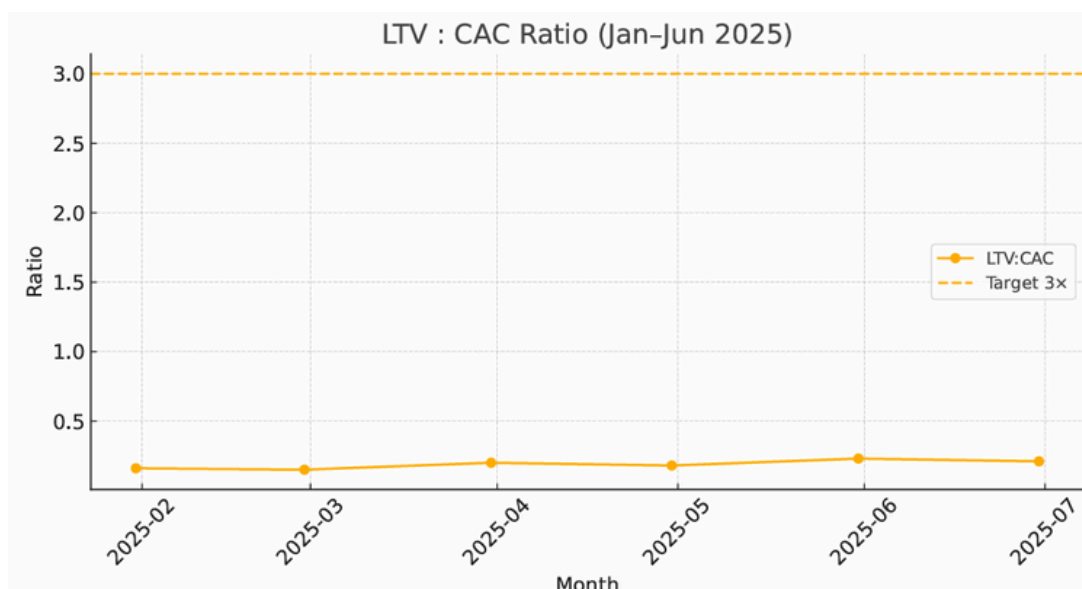
- Excel data staging, pivot calculations
- Python (Pandas, Matplotlib) automation, PDF/CSV outputs
- Power BI interactive dashboard & visual analytics

Steps Involved in Building the Project

1. Data Collection: downloaded five CSV tables (revenue, expenses, customers, marketing, cash).
2. Data Cleaning: converted dates, removed duplicates, added month end helper columns.
3. KPI Modeling: built MRR, Burn, Cash Runway, CAC and LTV formulas in Excel & Pandas.
4. Cohort Analysis: created signup cohorts and retention percentages in Python.
5. Visualization: published MRR vs Burn line, LTV:CAC gauge and heat map in Tableau.
6. Reporting: exported monthly KPI CSV and generated this PDF summary.

Conclusion

The framework offers a repeatable, one click refresh for core startup health metrics. Findings reveal burn exceeding revenue by June 2025 and LTV:CAC below the 3× benchmark, suggesting urgefocus on acquisition efficiency and cost control. Future enhancements may incorporate gross marginLTV and scenario based runway forecasting



Monthly CAC and LTV:CAC

Month	CAC (₹)	LTV:CAC
Jan-2025	4999.0	0.16
Feb-2025	5498.0	0.15
Mar-2025	3999.0	0.2
Apr-2025	4499.0	0.18
May-2025	nan	0.23
Jun-2025	nan	0.21