



# Project Report

Project Title:

## SaaS Revenue Dashboard – Cohort and Growth Analysis

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### 1. Objective

The purpose of this project was to analyse **monthly recurring revenue (MRR)**, **total revenue growth**, and **customer retention trends** for a SaaS product. The goal was to deliver actionable insights into revenue performance, growth dynamics, and long-term customer value using cohort-based analysis.

The dashboard was designed to enable business stakeholders to quickly identify bottlenecks, track revenue health, and make informed decisions on **sales, marketing, and customer success strategies**.

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### 2. Dataset

- **Source:** SaaS product revenue dataset (CSV format).
  - **Period Covered:** June 2022 – May 2023.
  - **Data Points:**
    - Monthly recurring revenue (MRR)
    - Payment dates
    - Customer IDs
    - Locations (APAC, EMEA, USA)
  - **Granularity:** User-level payments aggregated into cohorts and monthly revenue trends.
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### 3. Tools Used

- **Tableau:** For dashboard creation, cohort analysis, and dual-axis trend charts.
- **Excel:** For initial data preparation, validation, and calculations.

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## 4. Business Questions Answered

- What are the trends in **new monthly recurring revenue (MRR)** over time?
- How is **total revenue evolving month-over-month**, and what are the growth rates?
- How do **user cohorts perform in terms of retention and revenue contribution** after their first payment?
- Which **regions (APAC, EMEA, USA)** drive the highest revenue growth?
- How consistent is **customer revenue retention** over multiple months?

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## 5. Methodology

### 1. New MRR by Month (Bar Chart)

- Calculated revenue generated from **new customers in the month of their first payment**.
- Provided visibility into acquisition-driven revenue.

### 2. Total Revenue & MoM % Change (Dual-Axis Chart)

- Displayed **total revenue** on the primary axis.
- Displayed **month-over-month growth percentage** on the secondary axis.
- Highlighted growth surges and downturns in revenue.

### 3. Cohort Revenue Retention Table

- **Rows:** First payment month of each customer cohort.
- **Columns:** Number of months since first payment.
- **Values:** Total revenue per cohort and month.
- **Gradient shading:** Represented retention ratio compared to the cohort's first-month revenue.
- Provided insights into **long-term retention and revenue decay**.

#### 4. Dashboard Interactivity

- **Filters:** By **Location** (APAC, EMEA, USA, All) and **Payment Date** (June 2022 – May 2023).
  - Allowed stakeholders to slice data by region and timeframe.
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#### 6. Results & Insights

##### **New MRR**

- Major spike in **July 2022 (\$44.1K)** driven by strong acquisition efforts.
- Subsequent months stabilised between **\$17K–\$27K**, indicating sustainable growth after initial momentum.

##### **Revenue Growth (MoM)**

- **High growth peaks:** +38% in August 2022 and +25% in October 2022.
- **Declines:** -13% in December 2022 and -9% in May 2023, potentially due to churn or seasonality.
- Overall, revenue climbed steadily to a peak of **\$162.3K in February 2023**.

##### **Cohort Analysis**

- Revenue retention shows a **gradual decline over time**, but many cohorts maintain **>60% of first-month revenue even after 6 months**.
- Early cohorts (June–August 2022) remained strong contributors, highlighting a **loyal core user base**.
- Signals the need for **enhanced mid-term retention strategies** to prevent later churn.

##### **Regional Trends**

- **USA and EMEA** accounted for the majority of revenue growth.
  - **APAC** performance remained modest but stable, representing an opportunity for expansion through targeted acquisition campaigns.
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## 7. Recommendations

### 1. Boost Customer Retention

- Implement loyalty programs and personalised engagement for cohorts showing early drop-offs.

### 2. Stabilise Growth

- Investigate factors behind declines in December 2022 and May 2023, such as churn drivers or seasonal effects.

### 3. Leverage High-Performing Regions

- Double down on marketing and product support in **USA and EMEA**, the top-performing markets.

### 4. Expand in APAC

- Run tailored acquisition campaigns and regionalised onboarding to unlock growth potential.

### 5. Cohort Monitoring

- Establish monthly cohort tracking to detect early churn signals and respond proactively.

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## 8. Business Impact

This dashboard empowers decision-makers to:

- Distinguish between **acquisition-driven vs. retention-driven revenue growth**.
- Quickly assess **month-over-month performance** and identify anomalies.
- Understand **customer lifetime revenue patterns** through cohort analysis.
- Optimise **regional strategies** for marketing, sales, and customer success.

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## 9. Link to Interactive Dashboard

 [View Dashboard on Tableau Public](#)

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10. Screenshot

