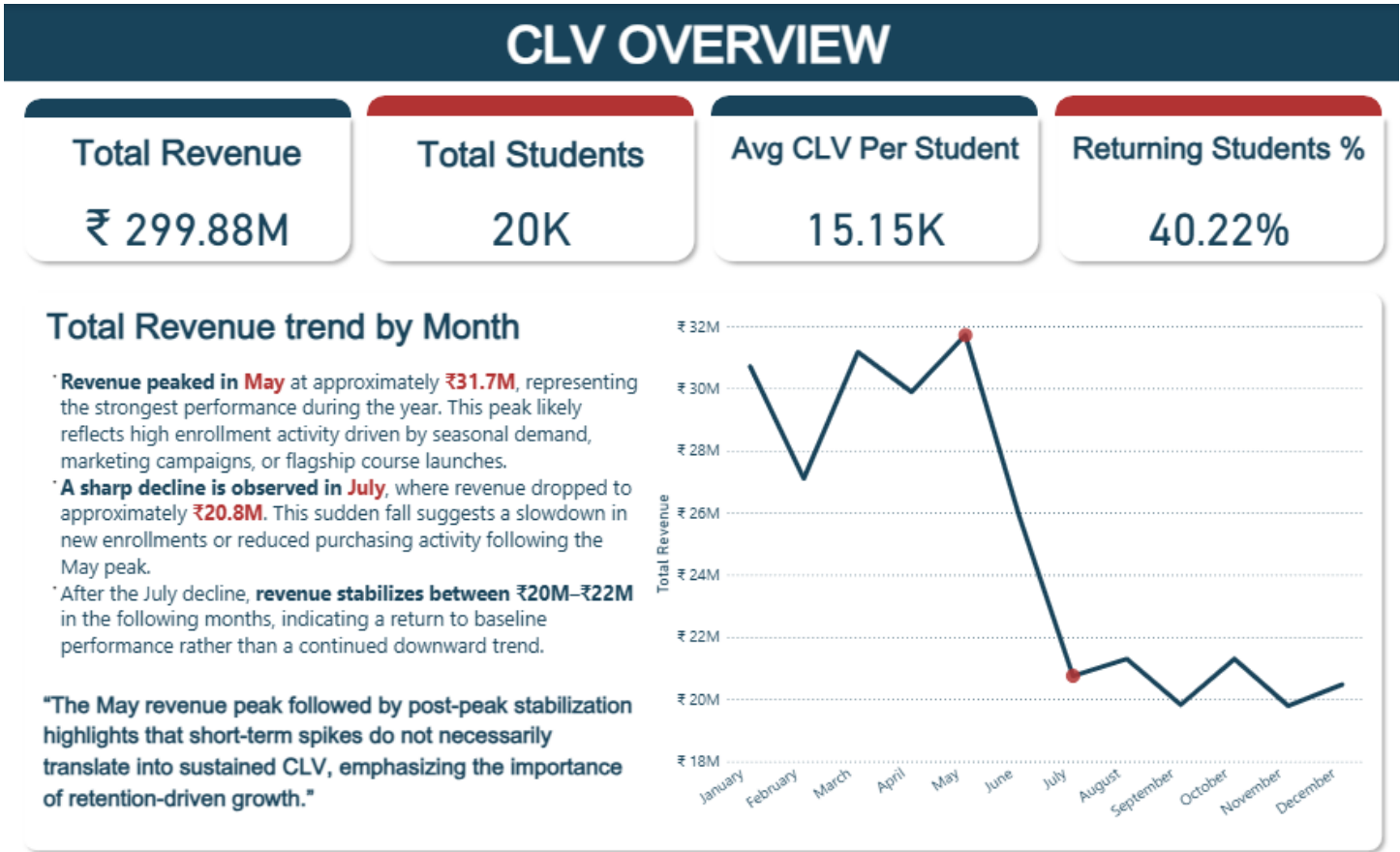# CUSTOMER LIFETIME VALUE (CLV) ANALYSIS - EdTech

Overall Context

This project analyzes **Customer Lifetime Value (CLV)** for an EdTech platform to understand how **revenue, engagement, course categories, and retention** interact to drive long-term business growth.

The platform has generated approximately **₹300M in total revenue from around 20,000 students**, resulting in an **average revenue per student of about ₹15K**.
While revenue is significant, the dashboards reveal that **long-term value is unevenly distributed** and highly dependent on **student behavior after the first purchase**.

Dashboard 1: CLV Overview (Executive Summary)

CLV OVERVIEW

Total Revenue	Total Students	Avg CLV Per Student	Returning Students %
₹ 299.88M	20K	15.15K	40.22%

Total Revenue trend by Month

· **Revenue peaked in May** at approximately **₹31.7M**, representing the strongest performance during the year. This peak likely reflects high enrollment activity driven by seasonal demand, marketing campaigns, or flagship course launches.
· **A sharp decline is observed in July**, where revenue dropped to approximately **₹20.8M**. This sudden fall suggests a slowdown in new enrollments or reduced purchasing activity following the May peak.
· After the July decline, **revenue stabilizes between ₹20M–₹22M** in the following months, indicating a return to baseline performance rather than a continued downward trend.

"The May revenue peak followed by post-peak stabilization highlights that short-term spikes do not necessarily translate into sustained CLV, emphasizing the importance of retention-driven growth."

What this dashboard shows

This dashboard provides a **high-level view of business performance**.

- Total Revenue: ~₹300M
- Total Students: ~20K

- Average Revenue per Student (CLV): ~₹15K
- Returning Students: ~40%

The monthly revenue trend shows a **strong spike around May**, followed by a **noticeable decline and stabilization** in later months.

What it means

The revenue spike suggests **short-term drivers** such as promotions, seasonal demand, or new course launches. However, the decline afterward indicates that **many students do not continue enrolling**, limiting long-term value.
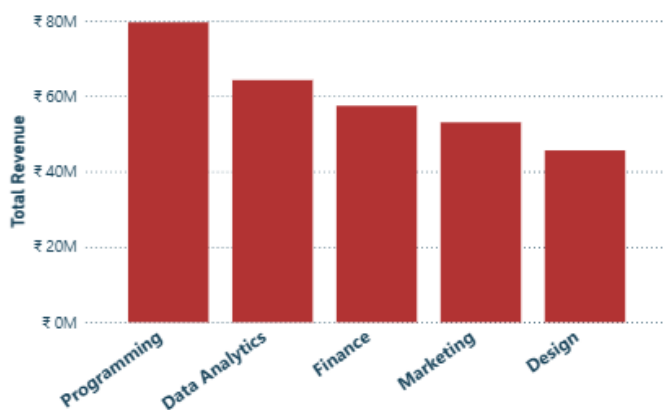
Key takeaway

High revenue months alone do not ensure sustainable growth.
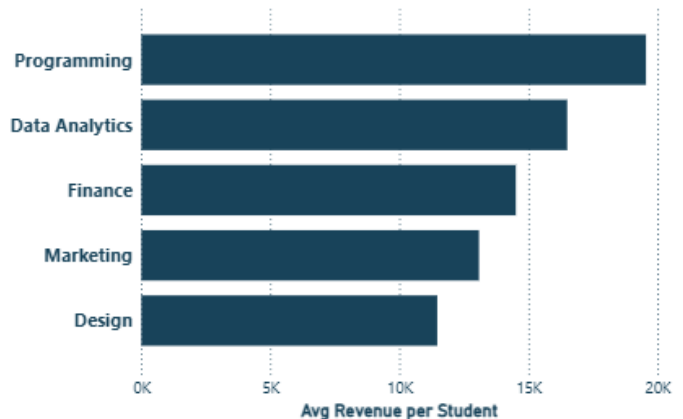**Retention is the missing link between revenue spikes and long-term CLV growth.**

Dashboard 2: Revenue Drivers by Course Category

REVENUE DRIVERS (CLV CONTRIBUTORS)

- **Programming** is the strongest revenue driver, generating the highest total revenue among all course categories. This indicates strong demand and consistent enrollment volume, making it a core contributor to overall business revenue.
- **Data Analytics** ranks second in total revenue while also maintaining a high average revenue per student, suggesting a balanced mix of strong enrollment volume and premium pricing, which makes it one of the most valuable categories from a CLV perspective.
- **Finance and Marketing** courses generate moderate total revenue with comparatively lower average revenue per student, indicating volume-driven growth but lower monetization per learner.
- **Design** courses contribute the least to total revenue and have the lowest average revenue per student, highlighting an opportunity to improve CLV through pricing optimization, bundling, or enhanced engagement strategies.
- Course categories that combine high enrollment volume with high average revenue per student—such as **Programming and Data Analytics**—are the strongest drivers of customer lifetime value. Prioritizing these categories can improve long-term revenue stability and maximize CLV growth.
- The contrast between high-volume and high-value categories suggests that CLV can be improved not only by increasing enrollments, but also by enhancing pricing and retention strategies within lower-value course segments.

What this dashboard shows

This dashboard breaks down revenue and CLV contribution by **course category**.

- **Programming** courses generate the highest total and per-student revenue
- **Data Analytics** is the second-strongest contributor
- **Finance and Marketing** contribute moderate value
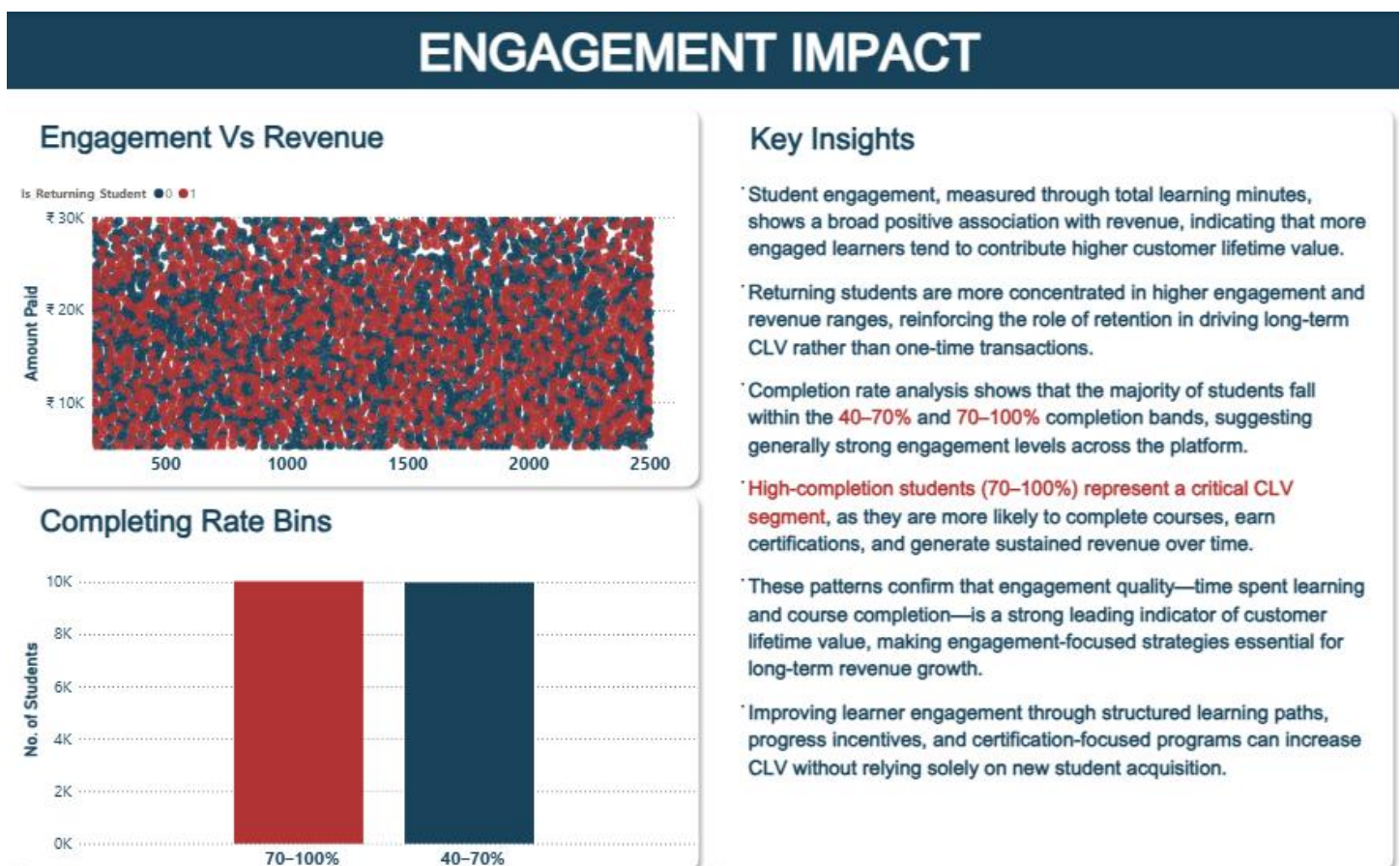- **Design** contributes the least to long-term revenue

What it means

Not all courses contribute equally to CLV. A **small number of categories drive a large share of total lifetime value**, while others bring volume but lower long-term impact.

Key takeaway

The platform's growth is highly dependent on **specific high-value course categories**, which should be prioritized for investment and improvement.

Dashboard 3: Engagement Impact on CLV

What this dashboard shows

This dashboard connects **student engagement** with revenue outcomes.

- Students with **higher learning minutes** generate higher revenue

- Higher **course completion rates** align with higher CLV
- Returning students appear more frequently in **high-engagement segments**
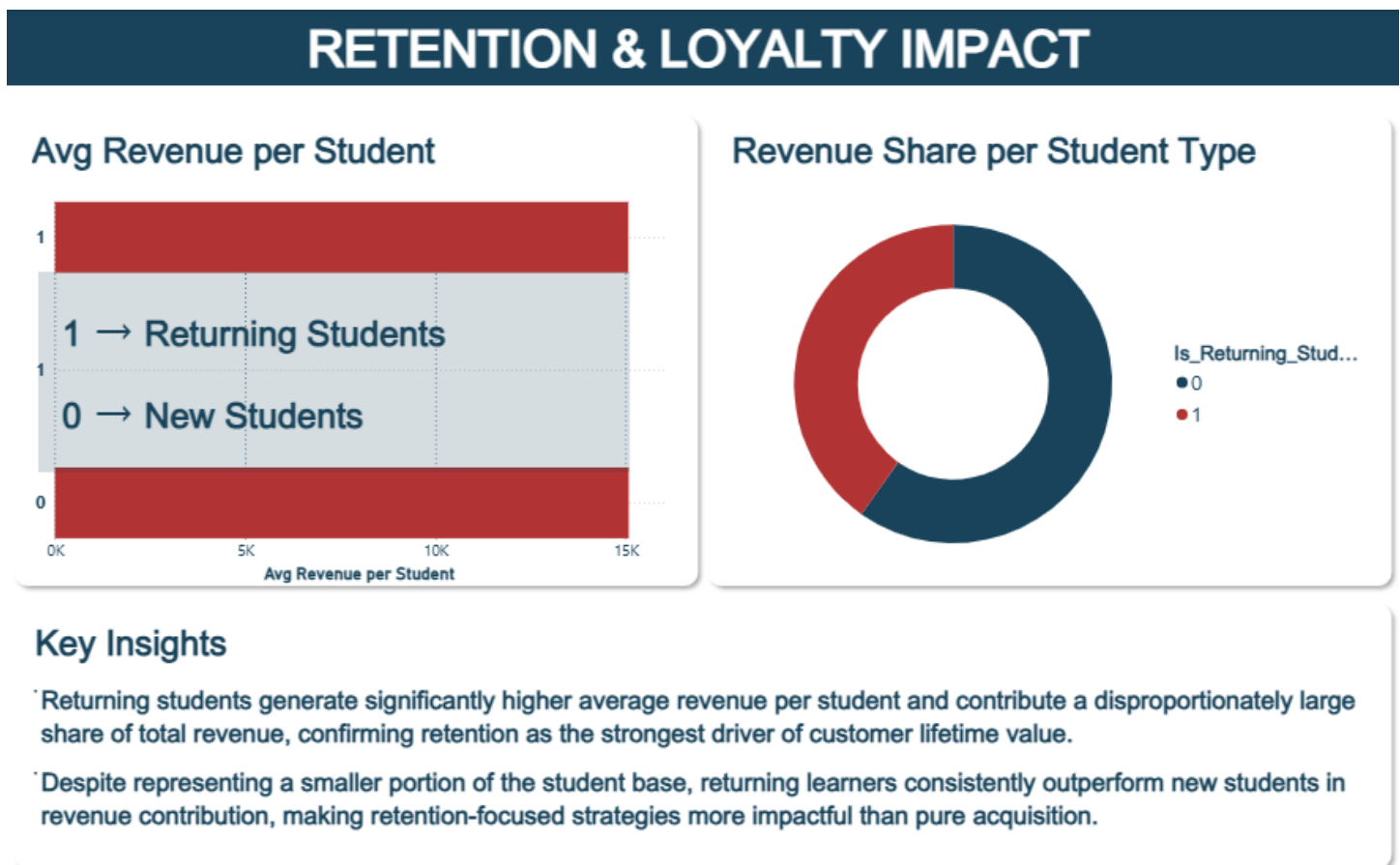
What it means

Engagement is not just a usage metric—it is a **strong predictor of long-term value**. Students who actively participate and complete courses are far more likely to continue learning and spending.

Key takeaway

Improving engagement directly improves CLV.
Learning behavior explains why some students become high-value customers.

Dashboard 4: Retention & Loyalty Impact

RETENTION & LOYALTY IMPACT

Avg Revenue per Student

1 → Returning Students
0 → New Students

Revenue Share per Student Type

Is_Returning_Stud...
● 0
● 1

Key Insights

Returning students generate significantly higher average revenue per student and contribute a disproportionately large share of total revenue, confirming retention as the strongest driver of customer lifetime value.

Despite representing a smaller portion of the student base, returning learners consistently outperform new students in revenue contribution, making retention-focused strategies more impactful than pure acquisition.

What this dashboard shows

This dashboard compares **new vs returning students**.

- Returning students generate **significantly higher average revenue**
- Even though they are fewer in number, they contribute a **disproportionately large share of total revenue**

What it means

The platform earns more by **keeping existing students** than by repeatedly acquiring new ones. Retention has a **compounding effect** on revenue.

Key takeaway

Retention is the **strongest driver of CLV** and the most reliable path to long-term growth.

Final Project Understanding

When all dashboards are viewed together, they tell a clear story:

- Revenue spikes exist but are short-lived
- A small set of courses drive most lifetime value
- Engagement explains *why* CLV increases
- Retention determines whether revenue is sustainable

This project demonstrates that **long-term success in EdTech depends on engaged, returning students rather than short-term acquisition-driven growth**.

Link for project – [GitHub](#)

Author: Yash Chauhan