GOOGLE ANALYTICS PERFORMANCE REPORT (datascience.one website)

Executive Summary

Objective:

The objective of this analysis is to evaluate user acquisition, engagement, and conversion performance for datascience.one education website offering data science courses, with a focus on improving lead quality, enrollment efficiency, and marketing ROI.

Key Outcomes

- Strong **top-of-funnel performance** driven by brand awareness and organic visibility
- Significant **variation in lead and conversion quality across channels**
- Clear **conversion friction within the lead funnel**
- Heavy **geographic and device concentration**, creating prioritization opportunities

Strategic Conclusion

Growth to date has been **volume-led**. Future impact depends on **scaling high-intent channels**, **reducing funnel friction**, and **tracking success through enrollment-focused KPIs**.

Data Sources & Methodology

Data Sources:

1. **Google Analytics 4 (GA4)**

   - User Acquisition
   - Lead Acquisition
   - Demographic Details
   - Engagement Overview
   - Event Analysis
   - Landing Page Engagement Overview
   - Organic Google Search Overview
   - Device Category Overview
   - Operating System & Screen Resolution

Methodology:

➢ Data extracted from **GA4** was provided. (GA4 dataset was separated –
  Separating GA4 datasets allowed to generate focused, accurate insights without
  mixing metrics across different analytical domains.)

➢ Data Cleaning using **Python** and **Power Query Editor**.

➢ Exploratory Data Analysis Using **Plotly**.

➢ Funnel and Cohort based analysis.

➢ Insight synthesis – Recommendations – KPI framework.

Bias Handling:

To avoid **zero-activity bias**, engagement analysis begins from each user's **first recorded interaction**, ensuring trends reflect actual behaviour rather than inactive periods.

Exploratory Data Analysis

1. Acquisition & Channel Performance Analysis

Traffic Volume Insights:

- Direct and Organic Social dominate user acquisition, indicating strong brand awareness.
- High-volume channels, however, show lower conversion efficiency.
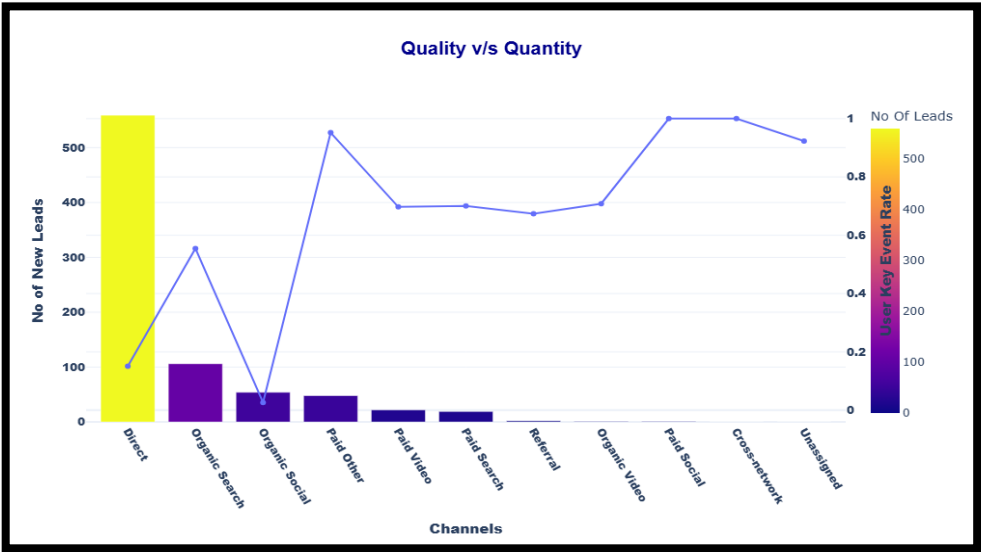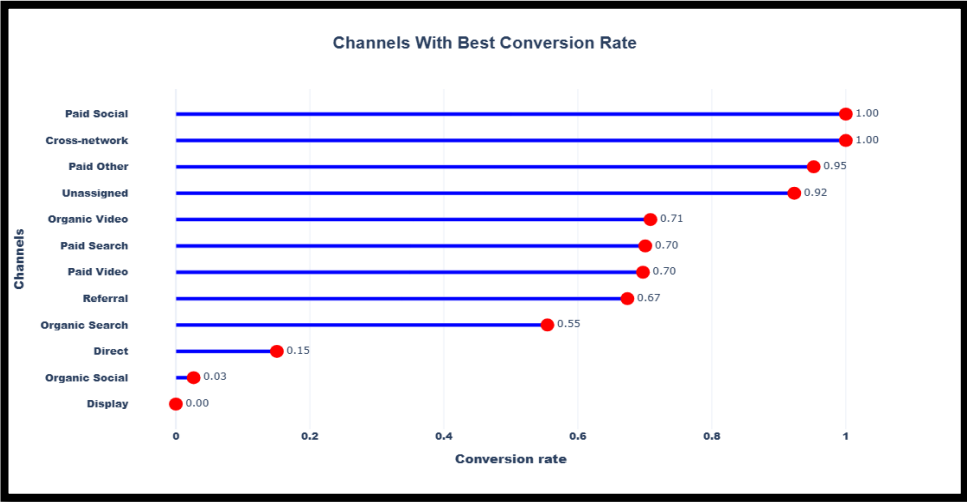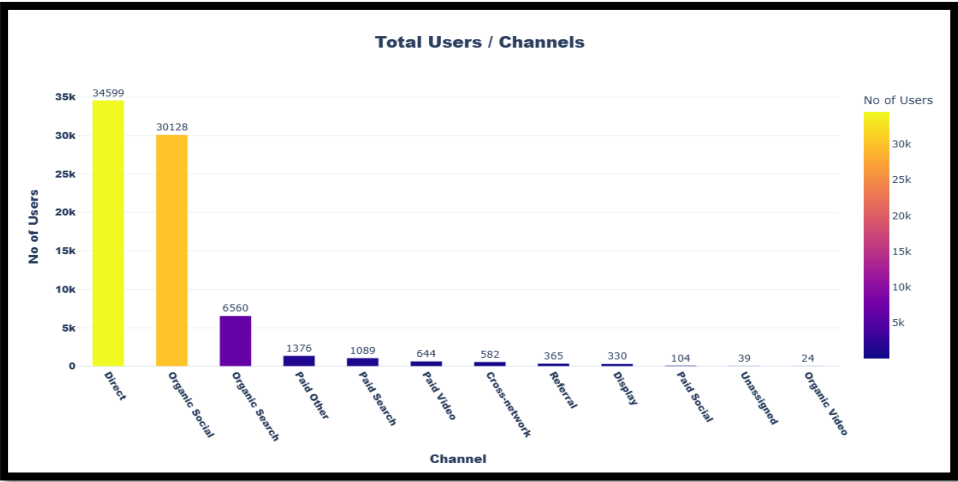 Conversion Quality Insights
- Paid Social and Cross-network channels generate fewer users but demonstrate exceptionally high conversion efficiency, signalling strong intent.
- Organic Search delivers the best balance between scale and quality.
  Interpretation
  Not all traffic contributes equally to business outcomes.
  Intent-driven channels outperform volume-driven channels on enrollments.

Charts:

Total Users / Channels

Channels With Best Conversion Rate

Quality v/s Quantity

2. Lead Funnel & Conversion Analysis

Funnel Observations:
- Page views dominate event volume, confirming strong content visibility.
- A sharp drop exists between **form starts and form submissions**.
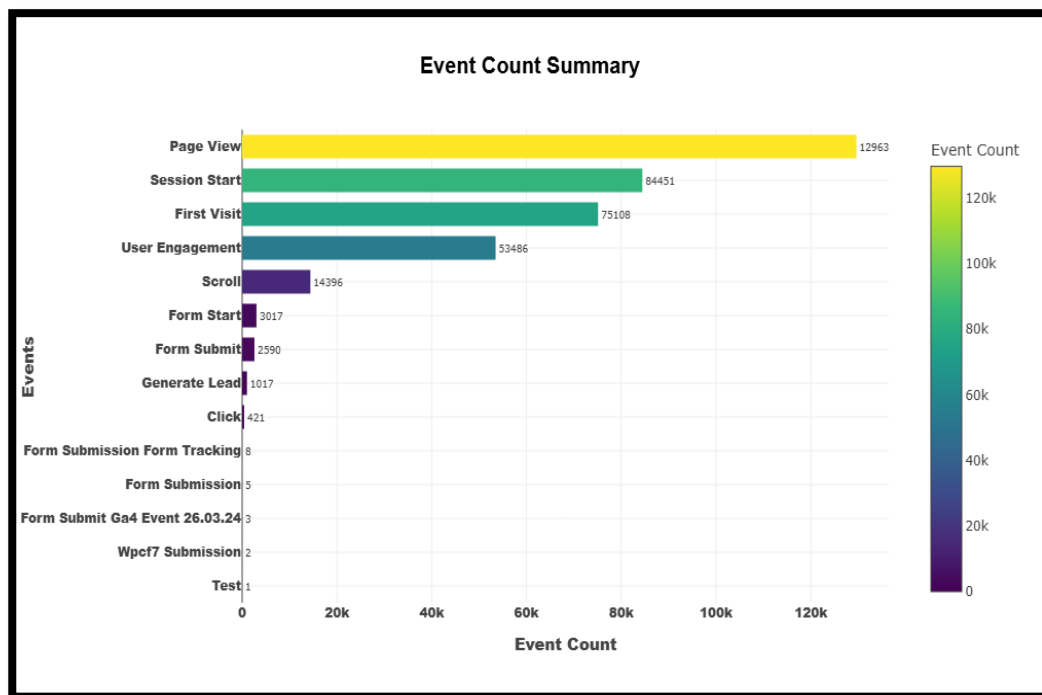- Lead generation remains limited relative to engagement volume.

Key Issue Identified:
Conversion friction, likely caused by:
- Long or complex forms
- Mobile UX limitations
- Lack of trust signals at conversion points

Business Impact
Improving funnel efficiency offers **high ROI without increasing traffic spend**.
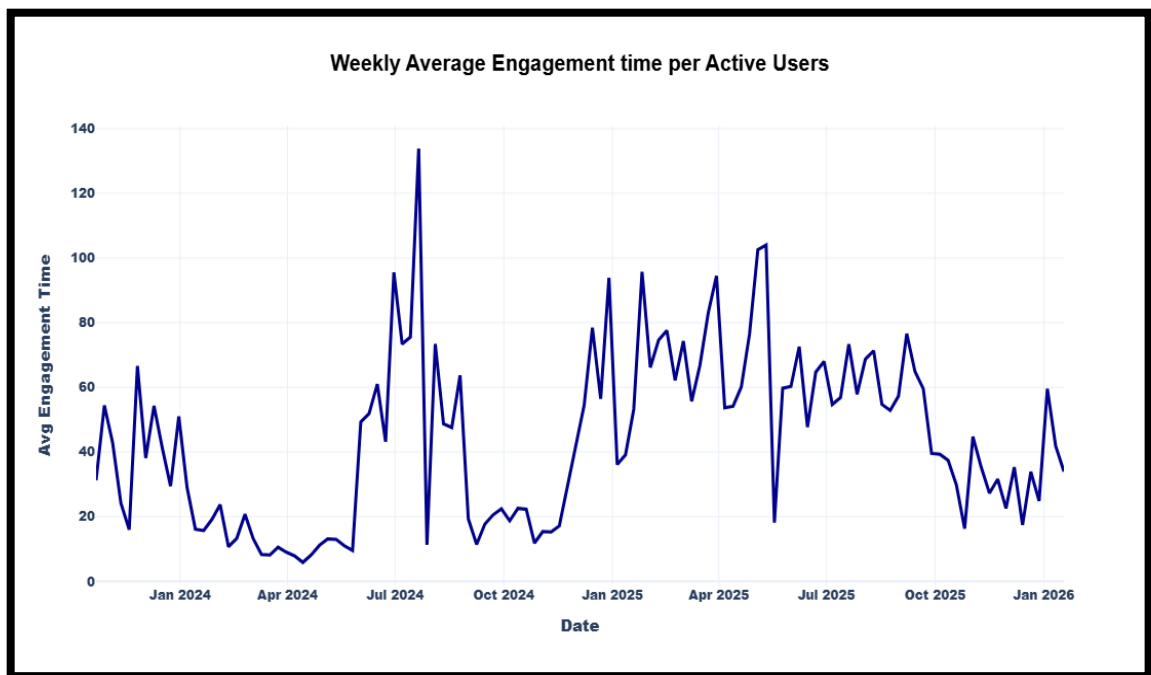

Event Count Summary

3. Engagement Trends Analysis

Engagement Behaviour:

- Early-stage engagement is volatile, indicating inconsistent initial interaction.
- Distinct engagement spikes align with campaigns or content releases.
- Post mid-2024, engagement stabilizes at a higher baseline.

Interpretation

User behaviour shows **maturation over time**, shifting from sporadic visits to sustained interaction — a positive signal for enrollment probability.

Weekly Average Engagement time per Active Users

4. <u>Geography & Device Analysis</u>

Geographic Performance:

- India contributes ~88% of total key events and is the primary revenue market.
- United States is the strongest secondary market, showing high conversion potential.
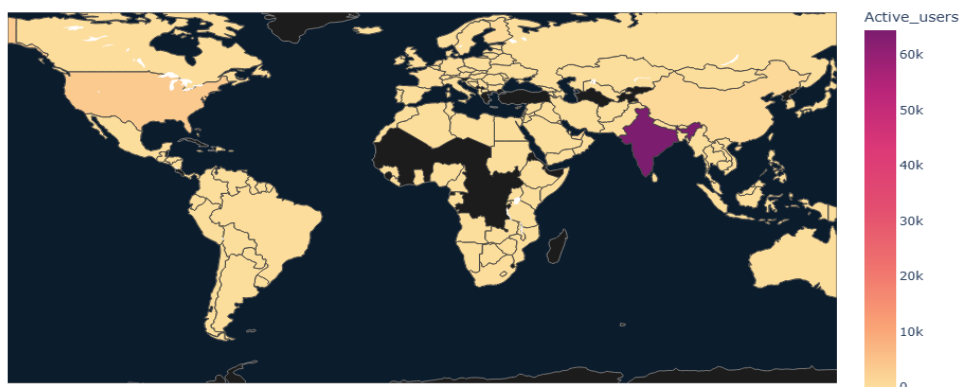- Other regions remain early-stage with limited engagement.

Device Insights:

- Mobile dominates traffic, with Android as the leading platform.
- Desktop remains relevant for research-heavy interactions.
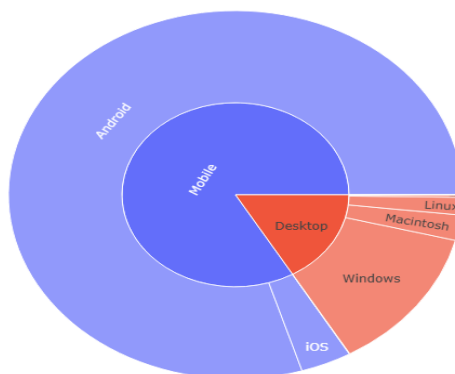- Tablet and Smart TV usage is negligible.

<u>Strategic Implication</u>

A mobile-first, geo-prioritized strategy is essential for efficient growth.

Active Users Distribution
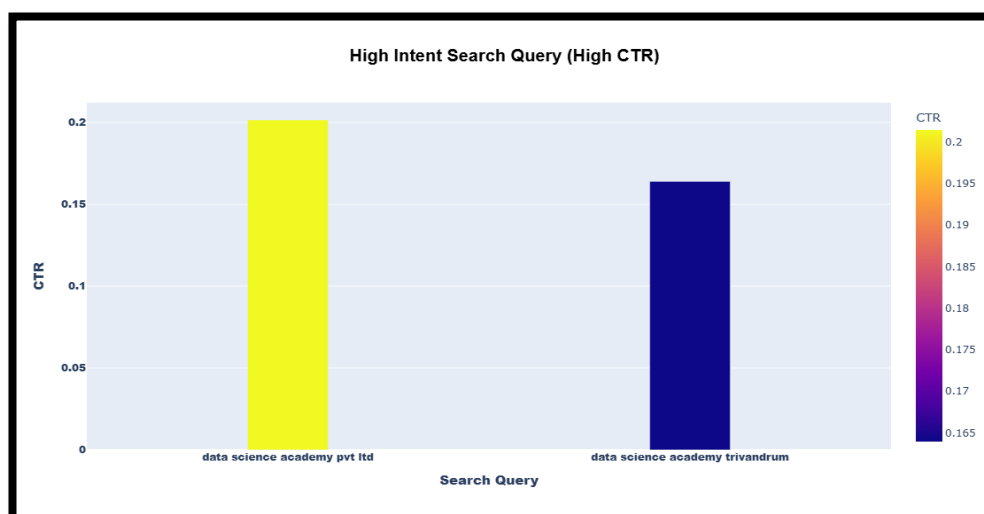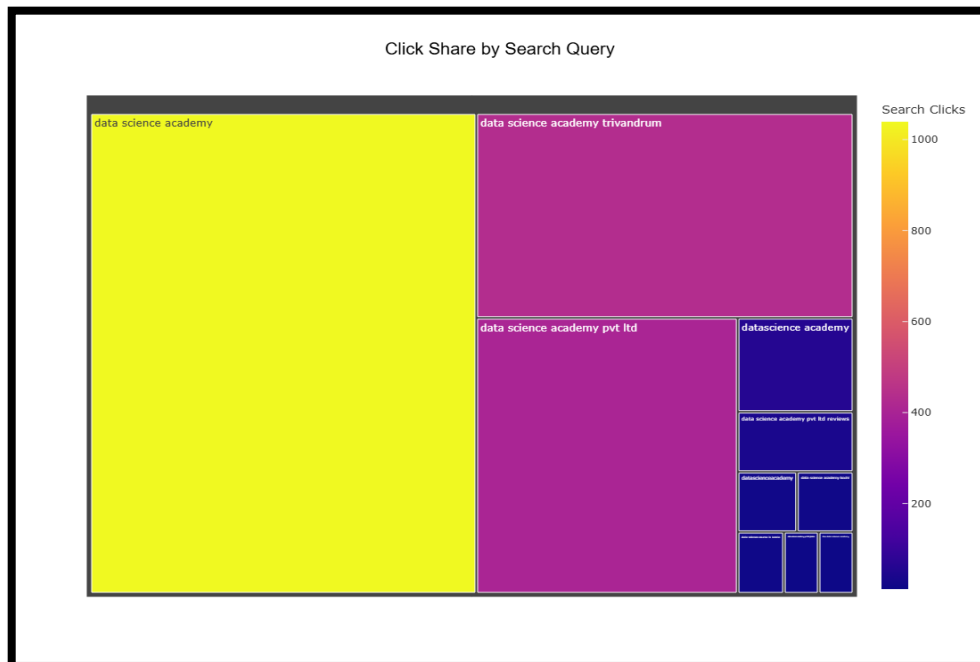

OS - User Distribution

5. SEO & Demand Analysis

Keyword Performance:

- Organic visibility is heavily brand-led, driven by "Data Science Academy" queries.
- Branded and location-based queries deliver very high CTR.
- Non-branded keywords show lower scale but strong expansion potential.

Opportunity:

- Improve CTR for high-impression keywords
- Expand non-branded and course-specific content
- Protect branded search dominance

KPI Framework

1. **North-Star KPIs:**

    - Course Enrollments

    - Enrollment Conversion Rate

    - Cost per Enrollment

    - Revenue per Enrollment

2. **Lead Quality KPIs:**

    - Qualified Lead Rate

    - Form Completion Rate

    - Lead-to-Enrollment Rate

    - Key Event Rate (High-Intent Actions)

3. **Acquisition Channel KPIs:**

    - Conversion Rate by Channel

    - Cost per Qualified Lead (CPQL)

    - Channel ROI

4. **Engagement & Consideration KPIs:**

    - Engaged Sessions per User

    - Average Engagement Time

    - Return Visitor Rate

    - Content-Assisted Conversion Rate

5. **SEO & Demand Capture KPIs:**

    - Non-Branded Organic Traffic Growth

    - Organic CTR (Top Keywords)

    - Share of Search (Brand vs Non-Brand)

6. **Geography & Market Expansion KPIs:**

    - Enrollments by Geography

    - Geo-wise Conversion Rate

    - Localized Page Conversion Rate

7. **Device & Experience KPIs:**
   - Mobile Conversion Rate
   - Mobile Form Drop-Off Rate
   - Page Load Time (Mobile)

8. **Retention & Nurture KPIs:**
   - Lead Nurture Conversion Rate
   - Time to Enrollment
   - Repeat Engagement Rate Before Enrollment

Final Conclusion

The analysis highlights a strong foundation of brand awareness and engagement. However, sustainable growth will depend **on quality-led acquisition**, **conversion optimization**, and **enrollment-focused KPIs**. By aligning analytics insights with execution and measurement, the organization can achieve scalable growth while improving marketing efficiency and ROI.