

## **Experiment 2 : Web Analytics**

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<b>D.O.P.</b>	<b><u>06/02/2025</u></b>
<b>D.O.S.</b>	<b><u>20/02/2025</u></b>
<b>Sign and Grade</b>	

### **AIM :**

To study a Web Analytics Tool

### **Theory:**

#### **1. What is Web Analytics?**

Web analytics is the process of collecting, analyzing, and interpreting data related to website activity. It provides insights into user behavior, website performance, and the effectiveness of marketing efforts. By understanding how visitors interact with a site, businesses can make data-driven decisions to enhance user experience, optimize content, and improve conversion

#### **2. Web Analytics Tools and Their Features?**

##### **a. Google Analytics**

- Features:
  - Comprehensive website traffic analysis with real-time data.
  - Audience segmentation to track user behavior based on demographics and interests.
  - Conversion tracking to monitor goal completions like purchases or sign-ups.
  - Custom reports and dashboards for tailored insights.
  - Integration with Google Ads and other Google services for marketing analysis.

##### **b. Adobe Analytics**

- Features:
  - Advanced data analysis and predictive modeling using AI.
  - Cross-channel data tracking for detailed customer journeys.
  - Real-time analytics for instant insights.
  - Integration with Adobe Marketing Cloud for marketing optimization.
  - Customizable reports and data visualizations.

#### **c. Hotjar**

- Features:
  - Heatmaps to visualize user interactions (clicks, scrolls, and movements).
  - Session recordings to replay user activity.
  - Feedback polls and surveys for direct user insights.
  - Funnel analysis to identify drop-off points in user journeys.
  - Behavior tracking for product experience optimization.

#### **d. Matomo (formerly Piwik)**

- Features:
  - Open-source and self-hosted, offering full data ownership.
  - Detailed visitor profiles and behavior tracking.
  - GDPR and privacy-compliant data management.
  - Custom reports and dashboards.
  - E-commerce tracking and conversion analysis.

#### **e. Crazy Egg**

- Features:

- Visual heatmaps and scrollmaps to analyze user behavior.
- A/B testing to optimize website elements.
- User recordings for session analysis.
- Traffic analysis to identify high and low-performing pages.
- Simple integration with website platforms like WordPress and Shopify.

### **3. Why is it Important to Learn Web Analytics?**

- **Data-Driven Decision Making:** It helps businesses make informed decisions by understanding customer behavior.
- **Improved User Experience:** Identifies pain points in the user journey, leading to design and content optimization.
- **Enhanced Marketing ROI:** Tracks the performance of marketing campaigns to adjust strategies for better results.
- **Goal Tracking:** Monitors conversions, lead generation, and other business goals.
- **Competitive Advantage:** Gaining insights into market trends and consumer behavior gives companies an edge.

### **4. Key Performance Indicators (KPIs) for Your Website**

- **Traffic Metrics:**
  - Total Visits, Unique Visitors, and Pageviews.
  - Average Session Duration and Bounce Rate.
- **Engagement Metrics:**
  - Time on Page and Pages per Session.
  - Scroll Depth and Interaction Rate.
- **Conversion Metrics:**
  - Conversion Rate and Goal Completion Rate.
  - Cart Abandonment Rate (for e-commerce).

- Acquisition Metrics:
  - Traffic Sources (Organic, Direct, Referral, Social).
  - Campaign Performance and Cost per Acquisition (CPA).
- Retention Metrics:
  - Returning Visitors vs. New Visitors.
  - Customer Lifetime Value (CLV).

These KPIs help businesses monitor the success of their website and refine their strategies for continuous growth.

Link to [website: https://gogreen-app.vercel.app/](https://gogreen-app.vercel.app/)

### **Output:**

#### **Basic Website Analytics Overview**

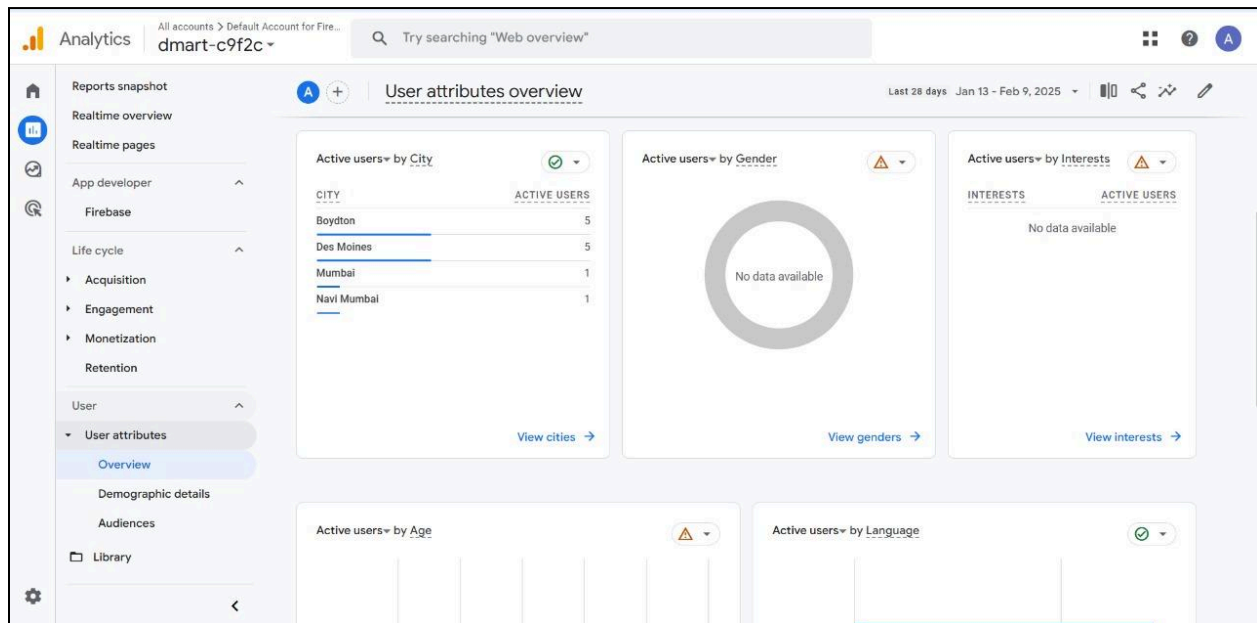
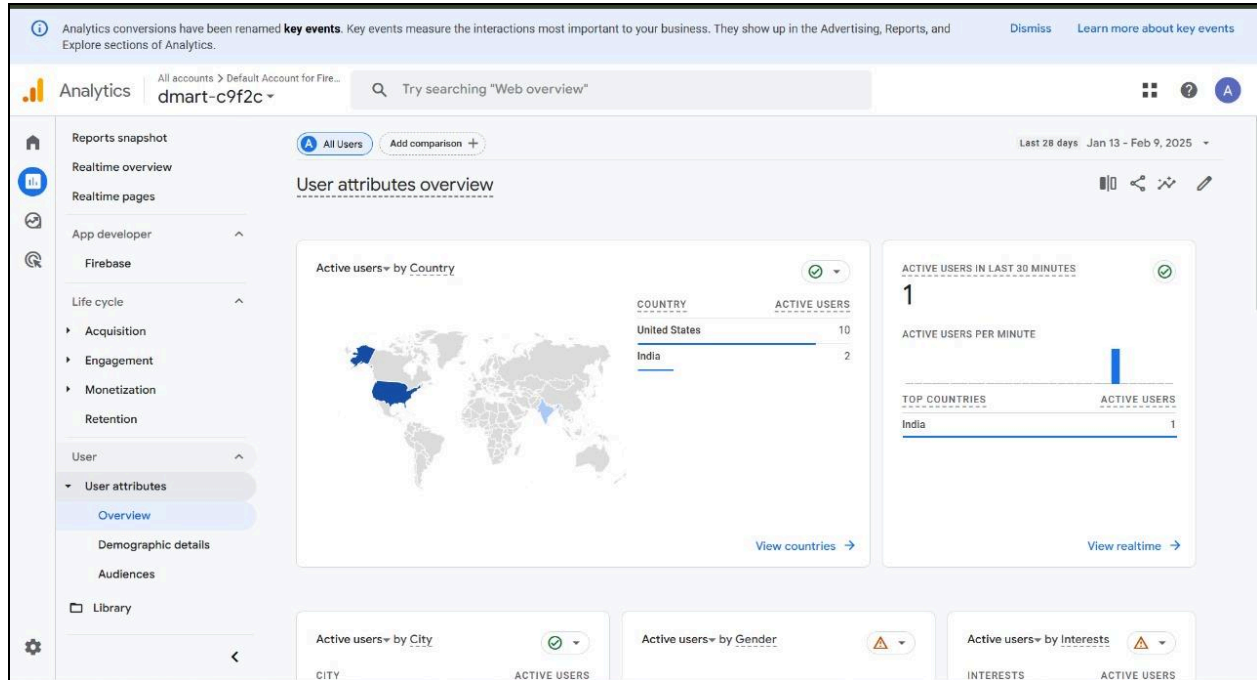
This image presents the general overview of your website's performance. It includes:

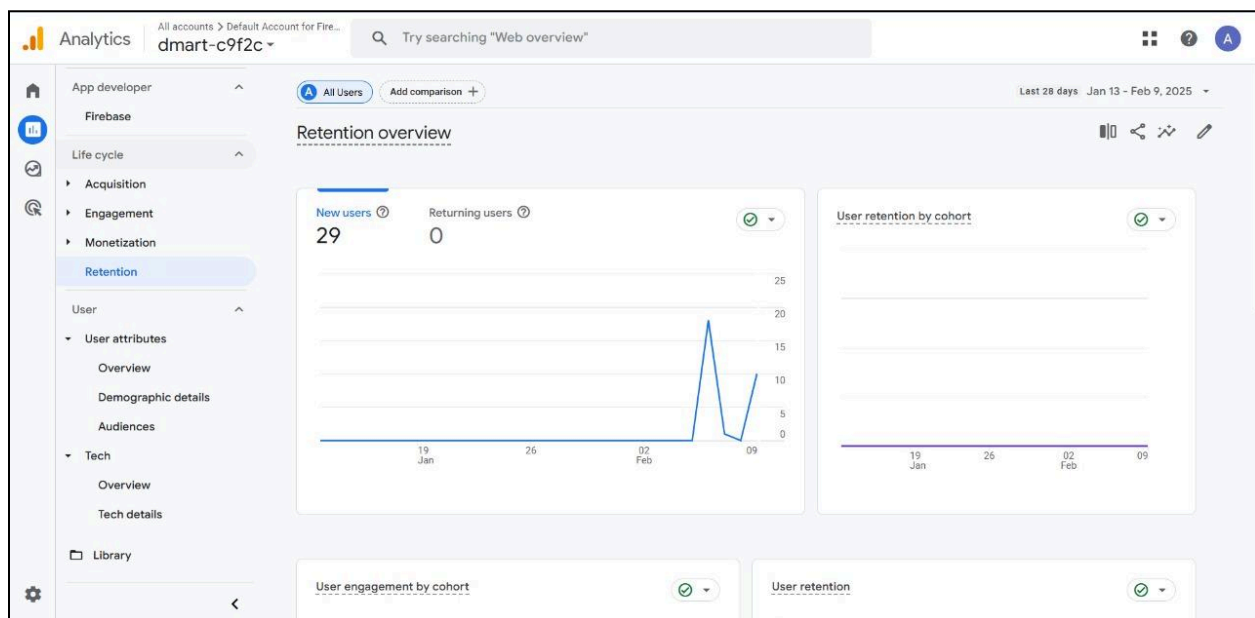
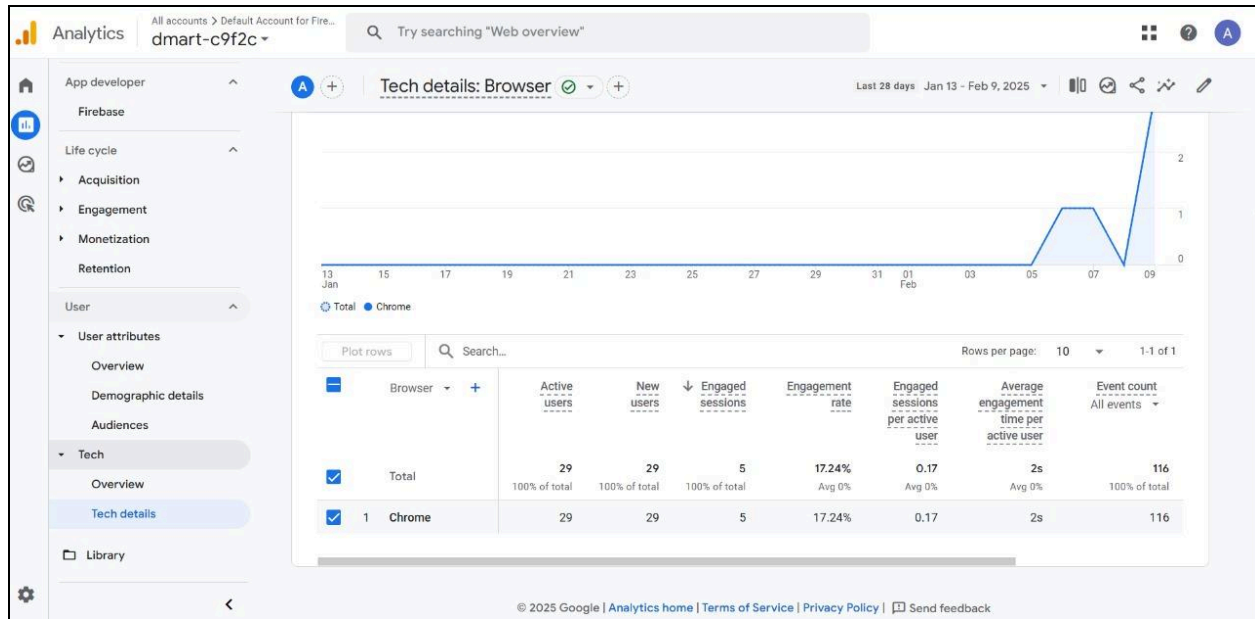
- **Users:** The number of distinct visitors to your site.
- **Event Counts:** Total number of tracked interactions (e.g., clicks, scrolls).
- **Conversion Rate:** The percentage of users completing desired actions like purchases or sign-ups.
- **New Users:** Number of first-time visitors.

#### **1. User Demographics**

This visual provides information about the geographic location, age, gender, and interests of your visitors. It includes:

- **Country and City Data:** Understanding where users are located.
- **Demographic Breakdown:** Insights into your primary user segments.

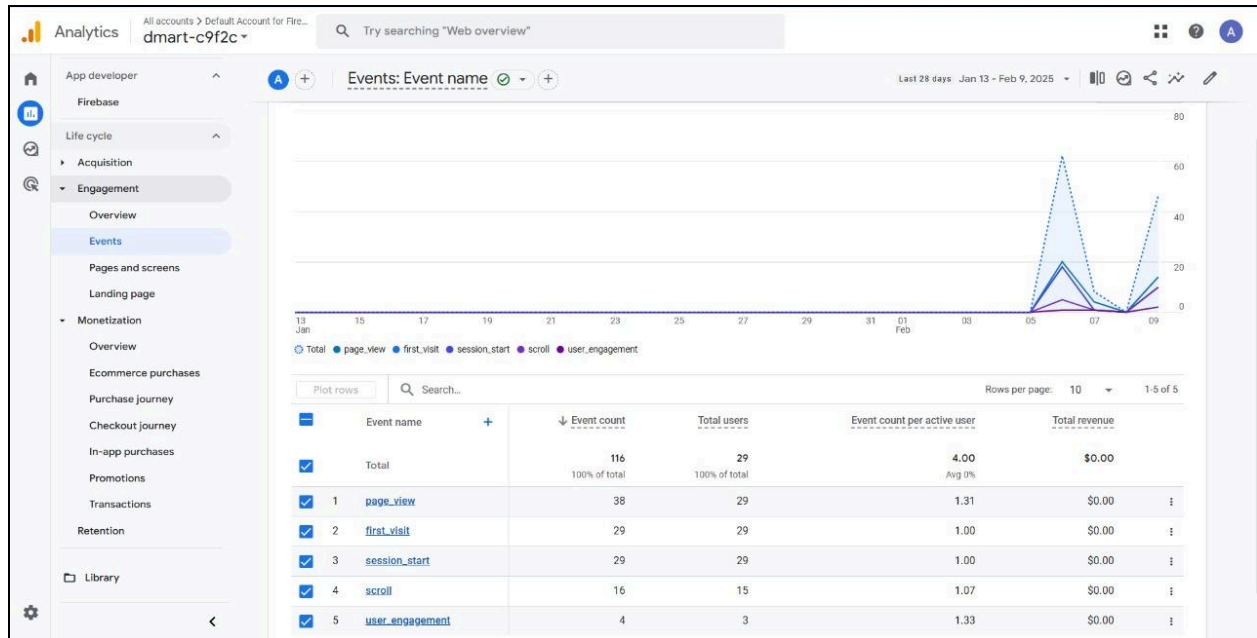




## 2. Event Tracking

This segment tracks user interactions on your website. Examples include:

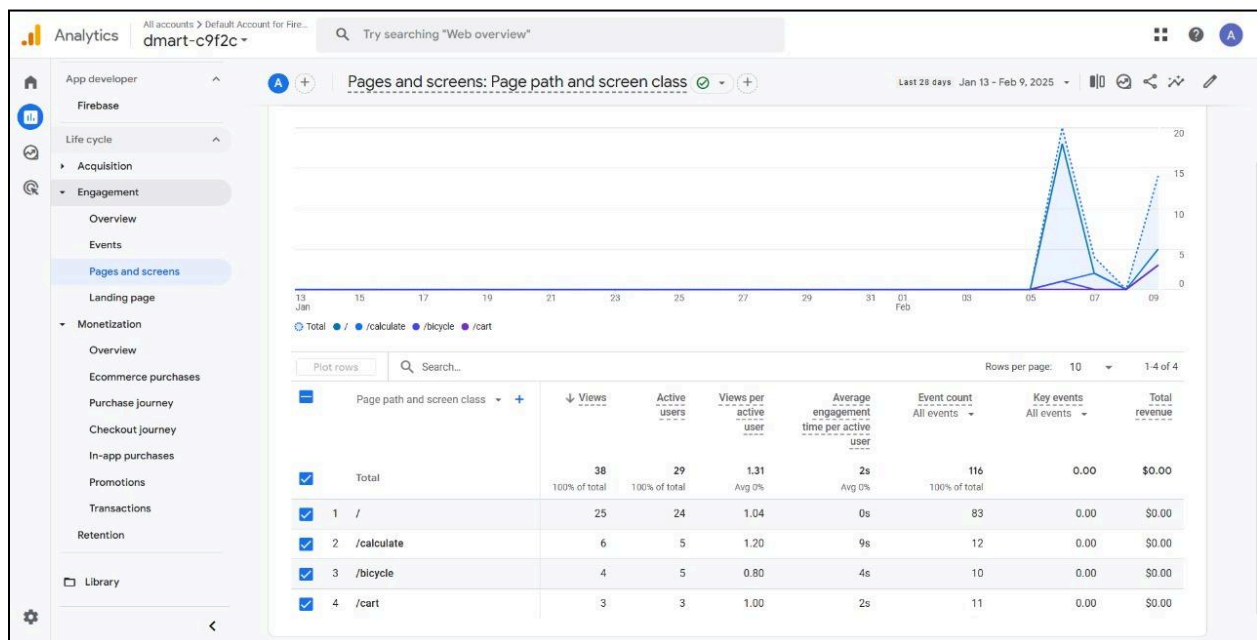
- **Page Views:** Number of people who viewed the page.
- **Button Clicks:** Instances of button interactions.
- **Scroll Events:** Users scrolling through your content.

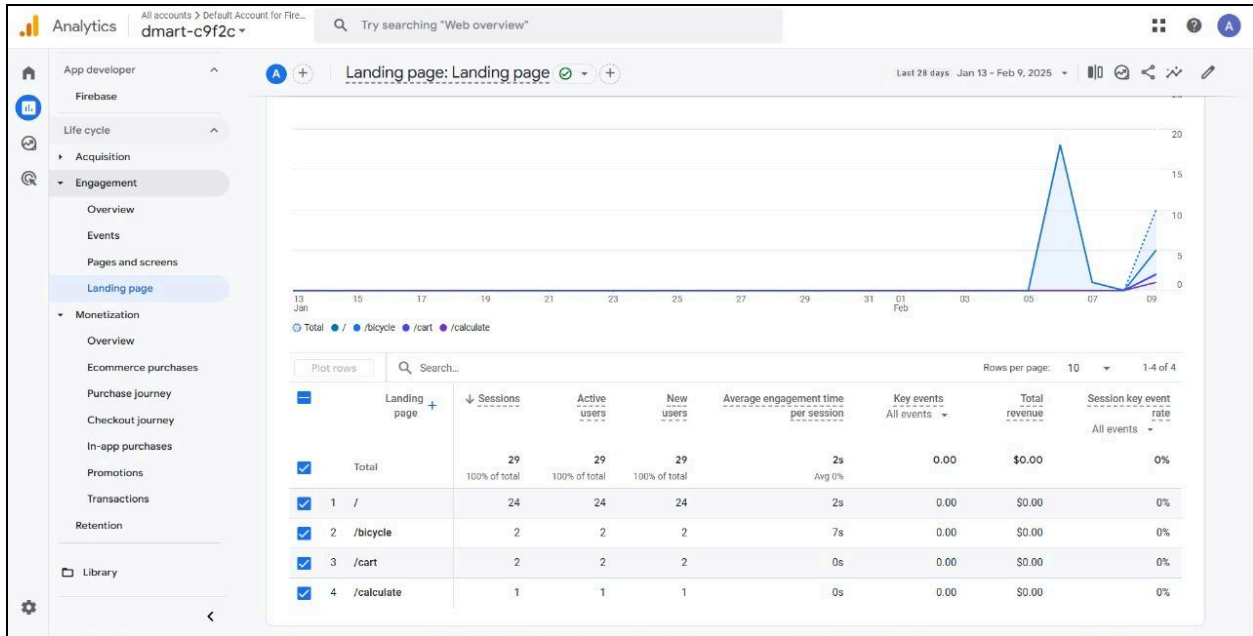


### 3. Page Traffic Analysis

This section shows how much traffic each individual webpage receives. The insights include:

- **Page Views:** Total views of a particular page.
- **Unique Visitors:** Number of distinct users visiting a specific page.
- **Average Time on Page:** The average duration spent on the page.

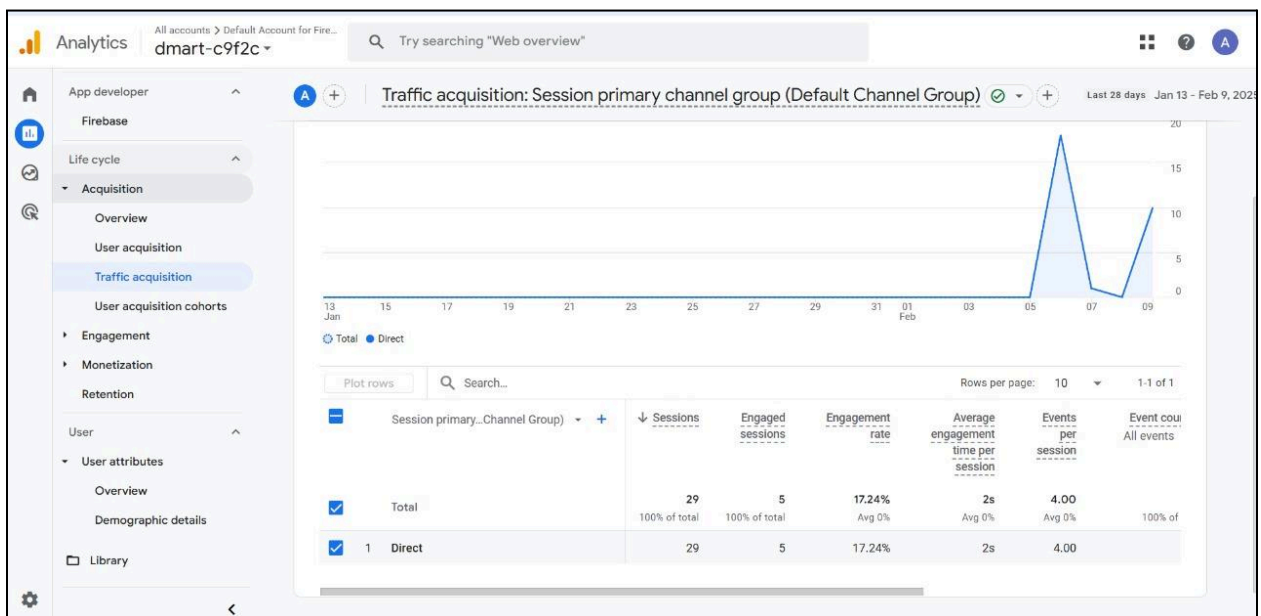




## 4. Traffic Sources

This section displays how visitors find your website. The sources include:

- **Direct:** Visitors who accessed your site by typing the URL directly.
- **Referral:** Traffic redirected from other websites.
- **Organic Search:** Visitors from search engines.
- **Social:** Traffic from platforms like Facebook, Twitter, or Instagram.

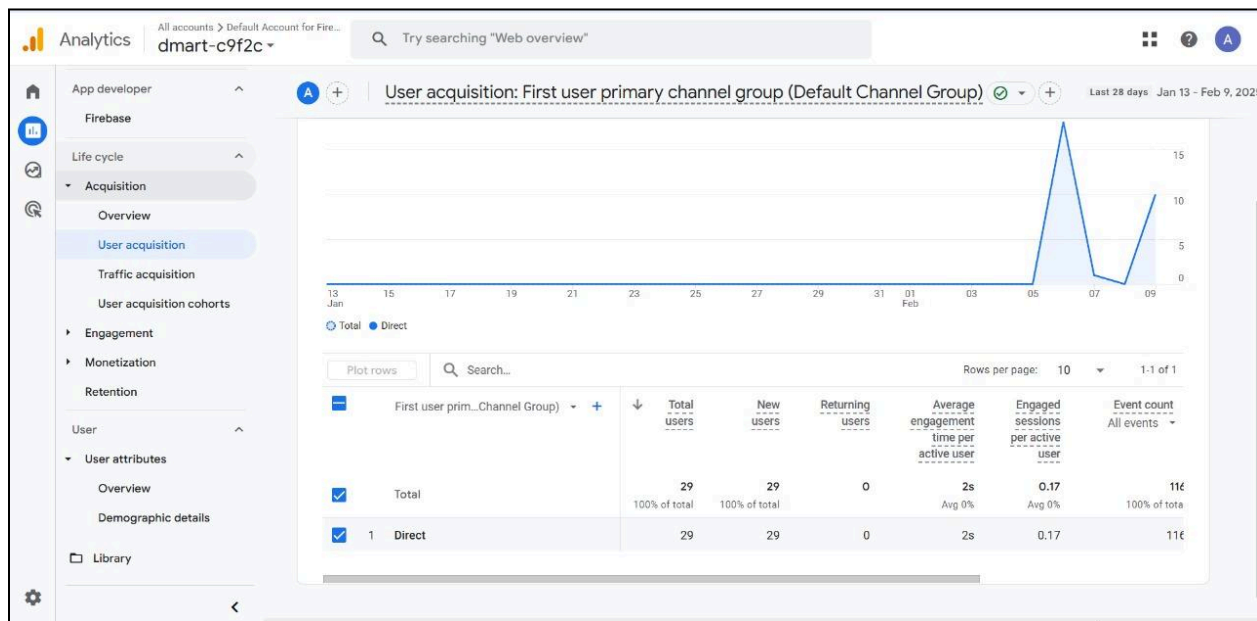




## 5. User Activity (Past 7 Days)

This section visualizes recent user engagement data. Key metrics include:

- **Engagement Sessions:** Number of interactions within a session.
- **Average Engagement Time:** The average time users actively engage on your site.
- **Event Counts:** Total actions performed by users.



These detailed insights from Google Analytics can help you optimize your website, improve user experience, and refine marketing strategies effectively.

## CONCLUSION :

Google Analytics provides valuable insights into user behavior, website performance, and marketing effectiveness. By analyzing data on user demographics, traffic sources, event tracking, and engagement metrics, businesses can make data-driven decisions to enhance their online presence. Regular monitoring and adjustment of strategies based on analytics can significantly improve user experience, increase conversions, and drive business growth.