## **Executive Summary: Website Performance Insights**

This analysis provides key insights into user engagement and traffic trends across different marketing channels over time. The following observations summarize performance across multiple dimensions:

### **1. Sessions and Users Over Time**

* The trend analysis reveals fluctuations in both **Sessions** and **Users** across different hourly intervals.
* Peaks in session activity suggest periods of high user interest, which may align with specific marketing efforts or content publishing times.

### **2. Total Users by Channel**

* **Channel Group** breakdown shows which platforms bring the most traffic.
* Channels like **Organic Search**, **Direct**, and **Referral** stand out as top contributors to user acquisition.
* Strategic focus should be placed on high-performing channels while optimizing underperforming ones.

### **3. Average Engagement Time by Channel**

* There is a notable difference in **Average Engagement Time** across channels.
* Channels with higher engagement times (e.g., **Referral** or **Email**) suggest better audience targeting or content relevance.
* Opportunities exist to improve engagement for lower-performing channels by tailoring content or UX.

### **4. Engaged Sessions per User Distribution**

* This metric shows user stickiness and interaction depth.
* Channels with high **Engaged Sessions per User** likely provide more value or relevance to the user.

### **5. Engaged vs Non-Engaged Sessions**

* The comparative barplot clearly differentiates engaged versus non-engaged session volumes by channel.
* Some channels show a high portion of non-engaged sessions — indicating poor landing page experience or irrelevant targeting.

### **6. Traffic by Hour and Channel**

* Time-based traffic analysis highlights when different channels drive the most sessions.
* This insight can help **optimize campaign scheduling** and **server load balancing**.