**Shopee Web Traffic Analysis Report**

**1. Dataset Collection:**

* **Data Source:** A frictional dataset from Google Gemini was used for this analysis.
* **Data Scope:** The dataset encompasses web traffic data, including serial number, page views, user sessions, bounce rates, traffic source, device type, age range, age, time on site, and user demographics.

**2. Data Cleaning and Preparation:**

* **Data Cleaning:** Missing values and duplicate were removed from the dataset
* **Data Preparation:** column like page views, age, and time on site were converted into ranges

**3. Analysis:**

**Traffic Sources:** Social media accounted for 27% of web traffic followed by Google (26%), Referral (24%) and Direct (24%)

**User Engagement:**

* **Number of Visitors:** total number of visitors is 2000

**Number of visitors by location:**

* UK (513)
* Australia (511)
* US (496)
* Canada (480)
* **Page views:** we have 10 pages as the average page views per visitor
* **Session:** Average session is 5.03.
* **Bounce Rate:** The average bounce rate is (0.50)

**User Demographics:**

* **Age Range:** The majority of users were between 31 and 59 years old (52%), followed by 0-30 (24%) and 60 above (22%).
* **Location:** Most traffic originated from UK having (26%), followed by Australia (25%), US (24.80%) and Canada (24.00%)
* **Device Type:** Smart Phone accounted for (33%) of traffic, followed Desktop (31%), tablet (31%) and Mobile with (3.8%) usage.

**4. Visualization:**

* **Traffic Sources:** A Table illustrated the distribution of traffic across different sources.
* **User Engagement:**
  + Cards used in representing the number of visitors, Average page view, Average user session and Average Bounce rate
* Pie graphs depicted the time spent on the website
* Combo chart depict the trend in the time spent on site base on the number of pages.
* **User Demographics:** Line chart represent the trend in the age range.

**5. Insights and Recommendations:**

* **Optimize Search Engine Visibility:** Focus on improving Google search rankings through SEO efforts.
* **Enhance Social Media Presence:** Increase social media engagement by creating targeted content for different platforms.
* **Improve Website Navigation:** Simplify website navigation to reduce bounce rates and increase time on site.
* **Target Core Demographic:** Tailor marketing efforts to the 31-59 age group in the United Kingdom.
* **Optimize Mobile Experience:** Ensure a seamless mobile experience to cater to the growing mobile user base.

**Recommendations for Further Analysis:**

* Conduct testing to evaluate the impact of design changes on user behavior.
* Analyze user behavior data to identify user segments and preferences.
* Explore the relationship between user demographics and purchasing behavior.

**Conclusion:**

This report provides a preliminary analysis of web traffic data, highlighting key trends and insights. By addressing the identified areas for improvement, the website can enhance user experience, increase engagement, and drive conversions.