WEBSITE TRAFFIC ANALYSIS

PROBLEM STATEMENT:

To analyze website traffic data to understand user behaviour, popular pages and traffic sources , helping website owners to improve user experience.

Website traffic analysis is a crucial aspect of data analytics, providing valuable insights into user behavior and interaction patterns on a website. Analyzing website traffic helps businesses and website owners understand their audience, optimize user experience, and make data-driven decisions to enhance their online presence.

DESIGN THINKING

DATA COLLECTION :

Data Points:

- Metrics such as page views, unique visitors, bounce rate, time spent on site, referral sources, and user demographics are collected**.**

- collecting data on user interactions, page views, referral sources, and more.

DATA CLEANING :

Cleaning and Formatting:

-Raw data collected from tools might need cleaning to remove inconsistencies and formatting to make it suitable for analysis.ING.

- Clean and prepare the collected data by removing duplicates and handling missing values.

DATA ANALYSIS :

- Descriptive Analysis: Understanding what happened. This involves looking at historical data to understand trends and patterns in website traffic.

- Diagnostic Analysis: Understanding why it happened. Analyzing specific metrics to diagnose issues like high bounce rates or low conversion rates.

- Predictive Analysis: Predicting future outcomes based on historical data. For instance, predicting traffic patterns during specific seasons.

- Prescriptive Analysis: Suggesting actions to influence desired outcomes. For example, recommending website changes to increase user engagement**.**

USER BEHAVIOUR :

- Study how users interact with your website. Track page views, session duration, bounce rate (percentage of visitors who leave after viewing only one page), and the path visitors take through your site.

- Analyzing which pages users visit the most, the paths they take, and the actions they perform (like clicks, form submissions, or purchases).

TRAFFIC SOURCES :

- Identify where your website visitors are coming from. This includes sources like organic search (search engines), direct traffic (users who type your URL), referral traffic (visitors from other websites), social media, email marketing, and paid advertising**.**

CONTENT PERFORMANCE :

- Assess which pages and content pieces are the most popular and engaging. Determine which content leads to conversions and which needs improvement.

KEYWORD ANALYSIS :

- If applicable, analyze the keywords that drive organic search traffic to your site. Identify high-performing keywords and optimize your content accordingly.

AUDIENCE DEMOGRAPHS :

- Understand the characteristics of your visitors, such as age, gender, location, and language preferences. This helps tailor content and marketing efforts.

DATA VISUALIZATION :

- Create meaningful visualizations such as line charts, bar graphs, heatmaps, or dashboards to present insights effectively**.**

FEEDBACK LOOP :

- Based on your analysis, implement changes to the website to improve user experience and achieve your goals.

- A/B testing can be used to assess the impact of specific changes.

- Collect feedback from users and stakeholders to further refine your analysis and optimization efforts.

CONCLUSION :

Website traffic analysis, as part of data analytics, is a continuous process that empowers businesses to adapt to changing user behaviors and market demands effectively. It enables them to stay competitive and provide an optimal user experience, ultimately leading to business growth and customer satisfaction.Solution for the problem statement is given.