**Swiggy Web Analytics Dashboard - Final Project Outline**

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**Business Context:**

Swiggy has identified a perplexing phenomenon: substantial web traffic accompanied by underwhelming conversion rates. To elucidate this issue, two critical areas necessitated in-depth analysis:

- **Bot Traffic Distortion:** Investigating whether automated sessions are skewing marketing performance metrics.

- **Real User Behaviour:** Analysing the genuine user experience across devices, channels, and timeframes.

This project entails constructing two specialised Tableau dashboards to elucidate bot activity in contrast to real user behaviour, thereby empowering Swiggy’s marketing team to make informed and actionable decisions.

**Project Objective:**

- Quantify the impact of bot traffic on performance metrics.

- Comprehend user engagement patterns, drop-offs, and conversion influencers.

- Provide interactive, data-driven dashboards to guide Swiggy’s growth and retention strategy.

**Dashboard 1: Bot Activity Analysis**

**Purpose:**

To identify and segment bot traffic potentially inflating sessions, bounce rates, and misrepresenting campaign effectiveness.

**Key Insights:**

- Mobile devices, particularly Chrome browsers, exhibit high-volume but zero-duration sessions, indicating a strong bot presence.

- Pages where landing equals exit with high page views are likely scraped by bots.

- Some campaign spikes coincide with non-converting bot traffic, distorting ROI perception.

**Metrics & Charts Utilised:**

- Vertical Bar: Campaign vs Sessions (New vs Returning) - Identifies campaign traffic quality.  
**Stacked Bar - Session Composition by Traffic Source and Visitor Type**

**Pie Charts - Users vs Bots by Landing Page**

**Horizontal Bar - Bots by Device Type and Browser**

**KPI Cards - Sessions, Bot %, Conversion Rate**

**Validated Hypotheses:**

\* **H3:** Bot traffic is detected using low session duration and high page views.

\* **H5:** Some campaigns generate high sessions but low or no conversions.

\* **H9:** Peak bot activity is observed in mobile Chrome sessions during organic traffic surges.

**Dashboard 2: User Behaviour Analysis**

**Purpose:**

To study real user interaction with Swiggy’s website - across traffic sources, devices, and visitor types - and derive optimisation opportunities.

**Key Insights:**

- New users form 70%+ but tend to bounce after one page, particularly on mobile devices.

- Direct traffic correlates with longer engagement, while paid traffic shows short sessions.

- Retention dropped in October despite high September visits.

- States like Maharashtra and Karnataka exhibit both high volume and conversion rates, making them suitable targets for growth.

**Metrics and Charts Used:**

\* Line Chart - Intra-Month Session Growth

\* Bar Chart - Avg Session Duration by Source

\* KPI Cards - Sessions, Bots, Conversion Rate

\* Bubble Chart - Sessions by State

\* Bar Chart - Month-over-Month Customer Type Trends

**Validated Hypotheses:**

\* **H1:** Device/OS differences in engagement observed via bounce/duration analysis.

\* **H2:** New visitors are more likely to bounce than returning users.

\* **H4:** Conversion is highest when session duration is longer and the source is direct.  
**H6: Geographical Variations in Engagement**

**Filters and Interactivity**

Filters include:

- Traffic Source

- Campaign

- Visitor Type

- Device Type

- Operating System

- Browser Type

- Date/Month

- Landing Page

**Files Included in the Project**

\* Final Dashboard.twb - Tableau workbook containing both dashboards

\* [DAF] - Tableau milestone data - Data.csv - Source dataset

\* Outline for working.docx - Original plan and hypothesis document

**Conclusion**

These dashboards offer a strategic perspective on Swiggy’s traffic patterns:

- Bot filtering enhances the accuracy of campaign analysis.

- User behaviour analysis uncovers actionable solutions for improving engagement and conversion rates.

- The marketing team can allocate budget more effectively, optimise platforms, and enhance user retention.