Dataset
- Included user online behavior, creative sizing, creative messaging, device the behavior was used on, location, ad exchanges, and ad publishers
- Metrics included impressions, clicks, viewable impressions, measurable impressions, gross cost, and conversion rate
- Excel for data cleaning
- 1000 Rows, 13 columns
- Cleaned up irrelevant characters; trimmed leading and trailing spaces
- Generated 10 KPIs (CTR, CPC, CPA, CVR, CPM, Viewability Rate, Journey Depth, Funnel Efficiency, CPD, & Performance Metric)
- Split the Location column into city and state

Tableau

https://public.tableau.com/views/AdTraffic/Dashboard1?:language=en-US&:sid=&:redirect=auth&:display_count=n&:origin=viz_share_link

- Could probably include more unique charts than bar charts
- Made sure to use colors that are easier on the eyes

Recommendations & Insights
- removed the **5 lowest-performing ad exchanges** out of 17, **reducing gross cost by $700K** and **increasing funnel efficiency by 14%.**
  - This was done to reallocate and optimize the budget for ad spend

- Identified the top 5 publishers based on the performance index (CTR × CVR ÷ CPA), indicating high engagement and conversions at a lower cost.
  - Could probably go more in-depth as to why
    - Maybe it has a more effective creative size or messaging
    - Maybe it has a lower journey depth
- The ad exchange Google Ad Manager had a **high gross cost ($1.67M)**but a **low performance metric of 0.013**, with the highest being 0.519 and the average being 0.0165
  - found that the exchanges had more audience segments than the rest
  - The top exchange (Sharethrough) has a **.519 performance metric,** but has **only 4 audience segments totaling $20,000,** whereas Google Ad has about 200+ segments, which could explain the discrepancy