**📊 E-Commerce Conversion Analytics Dashboard**

**🎯 Project Overview**

Interactive dashboard for marketing executives to analyze e-commerce conversion metrics using GA4 data from BigQuery public dataset.

**🔗 Live Dashboard**

<https://lookerstudio.google.com/reporting/cc7afbcd-9ac3-49ec-96f3-abd36cf22385>

**📊 Dashboard Components**

**🎛️ Filters & Controls**

* Date Range Picker: Session start time filtering
* Device Category: Mobile/Desktop/Tablet segmentation
* Traffic Source: Source/medium performance analysis
* Operating System: OS-based user behavior
* Device Language: Geographic and language insights

**📈 Key Performance Indicators (KPIs)**

* Total Sessions: Overall website traffic
* Total Orders: Completed purchases
* Total Revenue: Total sales revenue
* Conversion Rate: Session to purchase ratio

**📊 Visualization Charts**

1. Conversion Funnel: 7-step e-commerce journey analysis
2. Traffic Source Performance: Channel effectiveness
3. Device Category Distribution: User device segmentation
4. Revenue Distribution: Customer value segments
5. Daily Trends: Time-series performance tracking

**🗃️ BigQuery SQL Queries**

**1. KPI Metrics Query**

* Purpose: Aggregate sessions, orders, revenue, and conversion rate
* Used in: KPI scorecards
* <https://console.cloud.google.com/bigquery?sq=842372986119:c61f64b52c1d4e4e8086d7511528dfa6>

**2. Funnel Analysis Query**

* Purpose: 7-step conversion funnel visualization
* Used in: Funnel chart
* <https://console.cloud.google.com/bigquery?sq=842372986119:447942dfc3724ca49bb4f5e0ff633e12>

**3. Traffic Source Query**

* Purpose: Source/medium/campaign performance
* Used in: Traffic Source bar chart
* <https://console.cloud.google.com/bigquery?sq=842372986119:33d9ec20637045cfa08f4f7388f404a2>

**4. Device & Language Query**

* Purpose: Device category, OS, and language segmentation
* Used in: Device Category donut chart
* <https://console.cloud.google.com/bigquery?sq=842372986119:7b1d98ce9c2c4ed7a10a209c20c6bd1d>

**5. Daily Performance Query**

* Purpose: Time-series trend analysis
* Used in: Daily Trends line chart
* <https://console.cloud.google.com/bigquery?sq=842372986119:0176d97cbc364f68be5930861e80f312>

**6. Revenue Distribution Query**

* Purpose: Revenue segmentation and customer value analysis
* Used in: Revenue Distribution treemap
* <https://console.cloud.google.com/bigquery?sq=842372986119:156f8ad1ead9450db1a23667a1686209>

**🛠️ Technical Specifications**

* Data Source: GA4 Obfuscated E-commerce Dataset
* Platform: Google BigQuery + Looker Studio
* Date Range: November 2020 - January 2021
* Architecture: Custom SQL → Looker Studio Visualization
* Filters: Interactive cross-chart filtering

**📈 Business Insights Capabilities**

* Conversion Optimization: Identify funnel drop-off points
* Channel Performance: Optimize marketing spend
* Device Strategy: Mobile vs desktop user behavior
* Revenue Intelligence: High-value customer segments
* Trend Analysis: Seasonal and daily patterns

**🎯 Project Requirements Fulfilled**

✅ 7-step conversion funnel visualization

✅ Session, order, and sales metrics

✅ Session start time filter

✅ Minimum 5 interactive charts

✅ Segment filtering capabilities

✅ Professional dashboard design

\*Built with Google BigQuery and Looker Studio for advanced e-commerce analytics.\*