DESIGNING AN E-COMMERCE SEO DASHBOARD TO MONITOR ORGANIC SALES AND PRODUCT VISIBILITY IN GOOGLE DATA STUDIO

1. Client Background and Goal

A growing D2C fashion retailer in the US, operating via Shopify, was scaling its content and technical SEO efforts but lacked a single interface to track organic traffic performance across product categories. The team wanted a **real-time SEO dashboard** that could:

- Connect organic traffic data with revenue
- Visualize keyword ranking trends for non-brand searches
- Highlight product-level performance from SEO
- Track technical SEO health (bounce rates, site speed indicators)

Primary Goal: Provide marketing and SEO teams with daily insights into organic sales drivers without relying on manual reporting.

2. Data Sources and Integrations

The following data pipelines were used to build the dashboard:

- Google Analytics 4 (GA4): for traffic, bounce rate, session conversion
- Google Search Console (GSC): for impressions, clicks, average position
- Shopify Analytics (via Google Sheets): export of SKU-level sales data by traffic source
- **Lighthouse Performance Data:** uploaded monthly to track Core Web Vitals (manual CSV)
- Google Sheets: for lookup tables (SKU-to-product category mapping)

Tools Used:

- Looker Studio (Google Data Studio)
- Native GA4 and GSC connectors
- CSV connectors for Shopify and Lighthouse via Google Sheets
- Blended data sources (GA4 + Sheets) for attribution

3. Dashboard Design and Features

Page 1: SEO Revenue Summary

- KPI tiles for:
 - Organic traffic
 - Organic revenue
 - Conversion rate
- Graph: Traffic vs. revenue trend
- Pie chart: Revenue by product category

Page 2: Keyword Performance

- Table: Top 25 non-brand keywords (GSC)
- Sparkline: CTR trends over time
- Bar graph: Pages by average position

Page 3: Product Performance

- Table: Product SKU, organic sessions, organic sales
- Filter by product category or keyword group
- Heatmap: Engagement rate by device type

Page 4: Technical SEO

- Metrics: Avg. page speed, CLS, LCP (from Lighthouse)
- Scorecards: Pages with poor Core Web Vitals
- Chart: Bounce rate over time (GA4)

4. Key Metrics Tracked

- Sessions from Google / Organic
- E-commerce conversion rate (organic source)
- Revenue from organic sessions
- Top organic landing pages
- Non-brand keyword CTR and position

- SKU-level organic sales (Shopify match)
- Bounce rate and scroll depth
- Core Web Vitals by URL cluster

5. Impact and Outcome

- Clarity: The dashboard clarified the revenue contribution of SEO, separating it from paid traffic and brand searches
- Efficiency: Eliminated spreadsheet-based weekly reports
- **Strategic Insight:** Helped prioritize content and product page updates for keywords with high impressions but low CTR
- **Technical Focus:** Exposed top pages with failing Core Web Vitals to guide performance audits

6. Deliverables Provided to Client

- Live Looker Studio SEO Dashboard
- Google Sheets sync template with Shopify SKUs
- Keyword group filters based on intent (informational, transactional)
- User guide: how to read each KPI
- Update checklist: monthly CSV and field notes

7. Academic and Corporate Relevance

- **Corporate:** Highly suitable for Shopify stores, WooCommerce businesses, or marketplaces seeking SEO attribution clarity.
- **Educational:** Use-case for demonstrating SEO and sales data blending in Looker Studio with third-party sources.